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THE CHEMICAL MARKET AUTHORITY

April 10, 1961



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Oil, Paint and Drug Reporter

Vol. 179 No. 15 30 Church St., New York 7, N. Y. April 10, 1961

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# Potash—Boom!!

Can you top this?

That seems to be the question potash producers are asking one another as the industry's expansion boom continues.

While potash deposits in Carlsbad, N.M., diminish and the world's population explosion spurs an increasing demand for fertilizers, the latest to move into the impending breach are Pittsburgh Plate Glass Company and Armour & Co., with plans for a joint venture in solution mining of potash.

The new partners last week disclosed plans for a $1 million experimental solution drilling unit in the Canadian potash fields. Drilling of test wells has already started on a property eighteen miles east of Moosejaw, Sask., to tap desposits underlying that area.

This one comes on the heels of International Minerals & Chemical Corporation's conquest of the redoubtable Blairmore formation (OPD, 3/27/61), and Texas Gulf Sulphur Company's $30 million diversification into potash in southeastern Utah (OPD, 4/3/61).

In solution mining—an innovation for potash—water is pumped into the mineral deposit, the mineral is dissolved in the water, and then is recovered above ground from the solution.

Pittsburgh Plate's chemical division has for a number of years mined sodium chloride at depths as great as 6,800 feet by the solution method. Sodium chloride and potash (potassium chloride) are comparable to half-brothers, chemically speaking.

The new method is expected to compete with the conventional rock-mining process. It has already been proved on a small pilot plant scale, the joint announcement says, "and the operation of the Canadian pilot unit and test wells will give fur-

—Continued on page 39

# Chemical Laws Coming Faster From New Fonts These Days: The Legislatures of the States

If it isn't the federal congress that needs close watching by the chemical industry these days, it is the state legislatures. With all but three of the state law-making bodies in session at one time or another this year, the chemical people will have their hands full keeping tabs on the several hundred bills pending. Among them are measures dealing with such important matters as registration fees for agricultural chemicals, control of water and air pollution, food additives and licensing systems for pesticides.

The problems of state laws and the burdens they sometimes impose on the chemical business are, of course, not new; they have been with the industry almost since its beginning. But in recent years the problem has been growing.

**Ag Chem Registration Fees**

In the area of agricultural chemicals, one of the industry's biggest problems right now is curbing the desires of some legislators to make registration fees a source of new revenues for the various state treasuries. What the politicos would like is to see the chemical people go beyond the mere defraying of the expenses of registration.

The bills that have been introduced affecting agricultural chemicals are said to be no greater in number now than in the past, but they do have a tendency to be more detrimental to the industry.

The major battles being waged by this business in the states revolve around the question of excess tax loads being put on the industry.

Chemical companies are not opposed to the payment of registration fees to cover costs of the regulatory laws, but they are opposed to boosting these fees in order to raise funds for construction of laboratories or administration buildings, which are essentially capital investments.

When the fee systems were first imposed in 1947, they averaged about $5 per registration of an agricultural chemical with a maximum of $100 for a company.

They have gradually moved up to about $7.50 each for the first ten registrations

—Continued on page 38

MERCK MARKETING V. P.: Dr. Luther S. Roehm, elected vice-president for marketing of the Merck Chemical Division by Merck & Co., Rahway, N.J.

# Chemical Firms' Own Tankcars: Rate Allowances Ride Them No More

Shippers of alcohol, solvents and sulfuric acid, who had been getting special railroad allowances for furnishing their own tankcars, won't be getting them any more. Interstate Commerce Commission declared last week that the allowances henceforth are to be considered outlawed, despite the fact that the railroads had been paying them for something over a year. The commission says the payments amounted to a discrimination againt other shippers of liquid who furnish their own cars, and furthermore the arrangement failed to contain proper safeguards against unlawful rebates.

The railroad affected by the commission's ruling must discontinue the allowance payments by no later than May 1.

**There was a Special Plan**

In an effort to recapture some of the short-haul tankcar traffic being lost to motor carriers, railroads operating in official territory adopted a special plan. It called for payment of allowances amounting to $12.50 a car for shippers of alcohol and solvents and $15.50 a car for shippers of sulfuric acid, in addition to the regular mileage allowances of 5.5 cents to shippers who supply their own tankcars.

The scheme was put into effect December 1, 1959, over the protests of National Tank Truck Carriers, Inc., and continued in effect ever since while the ICC was making an investigation into its lawfulness.

The plan was supported by the Manufacturing Chemists' Association, which intervened in the case to submit statistical evidence showing the extent to which shippers in the east use rail services for moving various chemical products.

Rail carriers have long paid allowances on a mileage basis for the use of other than railroad-owned tankcars. The mileage allowances are paid to the owner or lessee of the car furnished but may not

—Continued on page 33

KOPPERS VICE-PRESIDENT: J. C. Macon, jr., elevated from sales manager to vice-president of its tar products division by Koppers Company, Pittsburgh, Pa.

# Warner-Lambert Vows It Will Not Sell Itself

Warner-Lambert Pharmaceutical Company is not interested in selling itself. That is the emphatic word from the Morris Plains, N. J., company's top man, president Alfred E. Driscoll. And last week he told it to a much-interested body, the New York Society of Security Analysts.

Mr. Driscoll laid it on the line for the financial men this way:

"I have been asked frequently, 'Is Warner-Lambert interested in selling itself to another company?' I want you to know my thoughts on this matter. Warner-Lambert is not for sale."

But Mr. Driscoll did not say the com-

—Continued on page 33

# Borane Fuel Plant Set To Go on Block in 1962

Want to buy a $45 million white elephant?

General Services Administration will have just that on its hands to dispose of in 1962. It's the Model City, N. Y., high-energy fuel plant of Olin Mathieson Chemical Corporation. The plant belongs to the Air Force, but has been operated by Olin. Capacity is five tons of borane high-energy fuel a day. The government pulled the

—Continued on page 37

# Ammonia Unit in Texas Is To Be Built by Grace

W. R. Grace & Co., New York, is all set to build a new ammonia unit in Big Spring, Tex., to supply fertilizer to the rapidly expanding agricultural area in the western part of the state.

William J. Houde, president of Grace's nitrogen products division, says the plant will be on stream early next year and is expected to produce in excess of 60,000 tons of ammonia annually.

The new unit will adjoin the Big Spring, Tex., refinery of Cosden Petroleum Corporation and will be operated for Grace by Cosden. Grace owns 53 percent of the outstanding stock of Cosden.

News of the new Texas plant follows by only a few weeks a Grace announcement of completion of additional ammonia capacity of 60,000 tons at

—Continued on page 37

# Polybutadiene Rubber: A 'First' Is Chalked Up

Firestone Tire & Rubber Company is taking credit for being the first tire manufacturer to begin commercial production of polybutadiene synthetic rubber. It all started last week when a new multi-million-dollar plant went on stream at Orange, Tex., to produce "Diene" rubber.

The plant is part of the Firestone Petrochemical Center, a 1,000-acre industrial site at which the company has produced butadiene, a raw material for synthetic rubber, since 1957.

The new facility has an annual capacity of 30,000 long tons of either "Diene" or "Coral" rubber.

("Diene" rubber when blended with natural rubber improves the quality of natural in truck tires and various other products. "Coral" is a complete replacement for natural rubber.)

Both are produced by stereospecific polymerization, using an alkyl metal cata-

—Continued on page 43

## *Methanol Business Loss Seen as Airlines Merge*

The United Airlines-Capital Airlines merger could mean the eventual loss or dissipation of nearly a million gallons of methanol business. United, the surviving entity, plans to divest itself of the methanol-consuming Viscount prop-jet planes Capital now flies.

Capital's 1959 requirements for methanol for anti-detonant injection fluid (ADI) for its fifty-seven Viscounts amounted to more than 840,000 gallons. United plans to retain only forty-one for now, and will replace them with Boeing 727 and Caravelle jet aircraft, which don't need methanol.

Despite this, E. I. duPont de Nemours & Co. moves unflinchingly ahead with plans to put up a 30-million-gallon methanol plant at Huron, Ohio (OPD, 4/3/61).

# Sulfur Dioxide Facility an 'Opening Gun' for Dixon

Dixon Chemical Industries, Inc., whose new hydrofluoric acid plant is due on stream next August at Paulsboro, N. J., has just confirmed plans for a 10,000 tons-a-year liquid sulfur dioxide facility.

Construction of the plant—described by Dixon as only the "opening gun" in a broad expansion campaign—is expected to get under way at Newark, N. J., in "the very near future," with completion scheduled by March 1, 1962.

Estimated cost of the project is $660,000. The plant's capacity will represent 12.5 percent of current US sulfur dioxide capacity, according to Arthur Dixon, president.

Mr. Dixon says that the company will soon announce plans for extending its distributing area for sulfuric acid, aluminum sulfate and chromic acid. The company's operations now reach from Philadelphia to lower New England.

News of the project was first disclosed in a Securities & Exchange Commission report on registration statements covering two securities issues proposed by Dixon and its affiliate, Dixon Chemical & Research. The company confirmed the project late last week.

Of the net proceeds from the sale of $1.5 million of 6 percent convertible debentures (due 1981) covered by the registration statement of Dixon Chemical Industries, $1.2 million will be applied to completion of the hydrofluoric acid plant. The balance will go into working capital.

Additional funds to complete construction of the plant are to be raised by sale

—Continued on page 38

# P.A.'s See Economic Upturn Following a 'Milder' Recession

*This report was prepared by the business survey committee of the National Association of Purchasing Agents.*

Business has turned up. A tone of optimism permeates the March reports of purchasing executives. The month's statistics indicate that we may have completed the bottoming-out process noted in our January report and rounded the bend toward the up side. If present trends continue to develop, the 1960-1961 recession will be shorter and milder than its predecessors. New order and production figures show further improvement since February; new orders are reported by 32 percent to have increased, up from 25 percent last month, while only 20 percent point to a worsened situation, down from 29 percent a month ago.

It is the first month since October, 1960, that the number reporting conditions better has been higher than the number reporting worse.

**Optimism From Production**

Production figures this month also show cause for optimism and, for the first time since October, 1960, the number reporting improvement exceeds the number reporting worsening conditions:

| *New Orders* | *Better* | *Same* | *Worse* |
|---|---|---|---|
| March | 32 | 48 | 20 |
| February | 25 | 46 | 29 |
| *Production* | | | |
| March | 29 | 52 | 19 |
| February | 24 | 47 | 29 |

While a tone of optimism prevails throughout this month's report, all is not sweetness and light. A review of the remarks made by our members shows that certain industries and geographical areas continue to find little about which to cheer. However, many of those reporting downward trends qualify their figures by stating that inquiries and requests for quotations are very encouraging.

Purchasing executives continue to keep close control on inventories, with only slight signs of willingness to add to present levels. Unemployment remains a major problem but, for the first time in many months, some improvement is noted. Prices again show some minor upward pressures. The general attitude seems to be that the improvement showing on all fronts is small but promising.

**Commodity Prices**

The gradual stabilization of prices, which first became apparent late in 1960, continues this month. Of the total reporting, 13 percent say they are generally paying higher prices for the commodities they buy, and this is the largest percentage so reporting since May, 1960. The percentage reporting lower prices decreased slightly—down to 10 percent from 11 percent in February—while 77 percent say prices have remained the

—*Continued on page 46*

### *Polyethylene Sheeting Is Hitting the Road*

Polyethylene is running strong on the nation's highways.

Most important new use is as a cover during the concrete curing period, according to a study by U. S. Industrial Chemicals Company. The New York State Department of Public works has reportedly just stamped its seal of approval on this application.

Also getting a lot of play are polyethylene tapes for protecting sawed joints on pavement, and polyethylene film as a moisture barrier under concrete slabs.

## GE Set to Enlarge Its Phenolic Facilities

General Electric Company is planning a $750,000 expansion in its phenolic molding compound plant in Pittsfield, Mass., calculated to increase plant capacity some 30 percent. Installation of new equipment will begin late this year and will be operational in 1962.

General Electric's last major investments in its phenolic compound plant were made in 1957 and 1955. Equipment installed in these projects at that time has been used at full or nearly full capacity in the past two years.

The new facilities will permit the department to compete more vigorously in the highly-competitive phenolic market. They will also permit introduction of new and improved phenolic molding products

—*Continued on page 39*

## Niagara Pesticide Facility Up at South Haven, Mich.

A new agricultural pesticide formulating plant has been completed at Southhaven, Mich., by the Niagara Chemical Division of Food Machinery & Chemical Corporation. The new unit will serve Michigan, northern Indiana and Ohio.

Containing 18,000 square feet of production and warehouse space, the plant replaces a former unit which had been leased by Niagara. The additional facilities now make possible the production of new formulations, as well as increased tonnages of established products.

## Butylphenol Price Cut

A price reduction of 2 cents a pound on p-tert-butylphenol has been made by Dow Chemical Company, Midland, Mich. Under the new schedule, price will be 23½ cents a pound in tankcar quantities and 25½ cents a pound, bagged, in carloads. The price change applies across the board on all quantities, freight allowed.

## *The Week's Price Changes*

**Cadmium, Ethyl Silicate, F Salt, Sodium Nitrite Advanced. Furfural Alcohol, Butylphenol, Styrene Monomer Reduced.**

**Prices Advanced**

Ammonium bicarbonate, ½c. per lb. (p. 35).
Cadmium, 10c. per lb. (p. 35).
6-Chloro-2-nitrotoluene, 4½c. per lb. (p. 42).
Cocoa butter, 1c. per lb. (p. 55).
Cottonseed oil, ¼c. to ⅝c. per lb. (p. 55).
Cyclohexanol, 2c per lb. (p. 42).
Ethyl silicate, 5c. per lb. (p. 49).
Dicyclohexyl phthalate, 1½c. per lb. (p. 51).
F salt, 20c. per lb. (p. 42).
Laurent's acid, 17c. per lb. (p. 42).
a-D-Methyl glucoside, 2c. per lb. (p. 49).
Mineral oil, 5c. per gal. (p. 40).
Neville and Winther's acid, 10c. per lb. (p. 42).
Petrolatum, ½c. per lb. (p. 40).
Picric acid, tech., 6c. per lb. (p. 42).
Sodium naphthionate, 5c. per lb. (p. 42).
Sodium nitrite, 40c. per 200-lbs. (p. 35).
Soybean oil, ¼c. per lb. (p. 55).
Sulfur dioxide, cylinders, small lots, 1c. per lb. (p. 35).
Sulfur monochloride, dms., c.l., ¼c. per lb. (p. 35), dms., l.c.l., ½c. per lb. (p. 35).
Tin metals (Straits), ⅝c. per lb. (p. 36).
Vinyl chloride monomer, .05c. per lb. (p. 49).

**Prices Reduced**

p-tert-Butylphenol, 2c. per lb. (p. 42).
Furfural alcohol, dms., 1c. per lb. (p. 49).
Lard, cash, ½c. per lb. (p. 55).
Linseed meal, 50c. per ton (p. 55).
Peanut meal, $4 per ton (p. 55).
Peanut oil, ¼c. per lb. (p. 55).
Peppermint oil, natural, 60c. per lb. (p. 53).
Redistilled, 60c. per lb. (p. 53).
Spearmint oil, $1.25 per lb. (p. 53).
Styrene monomer, tech., 1/100c. per lb. (p. 42).
Tetrahydrofurfuryl alcohol, 6c. per lb. (p. 49).
Vanilla beans, Mexican cut, whole, 15c. per lb. (p. 53).

**OPD Price Index**

THE OIL, PAINT AND DRUG REPORTER'S relative record of prices of chemicals and related materials is currently as follows:

(100=1949 average)

| April 7, 1961 | Mar. 31, 1961 | April 8, 1960 |
|---|---|---|
| 112.70 | 112.03 | 110.85 |

## Bleach Bleaches Bleaching Cost

A real cost-cutter for the synthetic fiber industry is the latest from Olin Mathieson Chemical Corporation. The New York-based company has developed a new sodium chlorite bleach process for the continuous bleaching of cotton, rayon, nylon, "Acrilan," "Dacron," and blends of these fibers. Heretofore the company's sodium chlorite bleach, "Textone," has been available only for batch operations.

The process makes possible a savings of up to 40 percent in material costs, Olin says. The company, reportedly the only commercial manufacturer of sodium chlorite in the US, has had the continuous process under development for the past two years.

In addition to economic advantages compared to peroxide bleaching, the process is said to give a better white with tensile and tear strengths the same as greige values.

Reportedly, the process also produces a fabric with softer hand, superior dyeing and printing properties, and freedom from localized tendering caused by metallic contaminants.

"Textone" is available in flake form and in water solutions. Flake "Textone" is a stable, dry white solid containing 81 percent sodium chlorite. The solutions are marketed in concentrations ranging 40 to 50 percent "Textone" by weight.

**KELCO VICE-PRESIDENT: Robert O. Davison, elected vice-president of the Kelco Company, Clark, N.J., producer of refined algin products.**

## Allied Plans Office Building At Site in Morristown, N. J.

A modern three-story building will be constructed by Allied Chemical Corporation, New York, at Morristown, N. J. The structure, which will comprise 250,000 square feet, will be occupied by engineering and administrative personnel of various divisions and will be completed by the middle of next year, according to an announcement made today.

In September of last year the company announced plans for the construction at Morristown of 50,000 square feet of additional building space which provides for the erection of a research laboratory, a process laboratory and a warehouse and garage.

## Parke, Davis Is Offering Improved Polio Vaccine

Parke, Davis & Co., Detroit, Mich., reports the availability in all its US branches of a new type of poliomyelitis vaccine, requiring a smaller dose.

The new product, "Poliomyelitis Vaccine, Aluminum Phosphate Adsorbed," requires injections of 0.5 cc. as compared with 1 cc. for the first fluid-type polio vaccine.

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D. J. Carroll Copps

## Organics Unit for Olin With Copps Running It

Olin Mathieson Chemical Corporation has just set up an organics division and put in D. J. Carroll Copps, a corporate vice-president (above), to head the unit as general manager. Headquarters will be located in New York, the home base for the parent company.

All activities of Olin's energy division have been consolidated within the new division. The organics division also includes the company's organic chemicals operations at Brandenburg, Ky.; the automotive and specialty chemicals facilities at Rochester, N. Y., and some related sales and research activities.

The organics division will manufacture a complete line of solvent and chemical intermediates including glycols and glycol ethers; ethylene oxide; glycerine; a complete line of explosives, fuses, and blasting caps; ball powder; ammonium nitrate; machinery for breaking out coal with compressed air; solid propellants; jet engine starters; gas generators and propellant ignition switches. Automotive chemicals include brake fluids and a complete line of radiator chemicals.

John O. Logan, corporate vice-president, will continue as general manager of the chemicals division, which formerly included the organic chemicals operations. Mr. Copps has been general manager of the energy division.

Other officers in the newly-formed organics division are:

N. A. Hamilton, vice-president and special assistant to the general manager; G. A. Siegelman, vice-president for production; J. L. Wetzel, vice-president in charge of marketing; H. A. Bruson, research vice-president; C. W. Smith, vice-

—Continued on page 43

## Spencer, Southern Oxygen Discussing Possible Merger

Spencer Chemical Company has confirmed reports of merger negotiations with Southern Oxygen Company, Bladensburg, Md.

John C. Denton, president, says that negotiations between the management of the two companies have been under way for several months in order to provide a basis for merger agreement. These negotiations have been promising, with Spencer to become the surviving corporation, Mr. Denton says.

However, no merger will be consummated

—Continued on page 54

# Drug Counterfeiting Is Not All It Was at First Feared to Be, But Still FDA Doesn't Like It

A nationwide investigation of prescription drug counterfeiting, under way since January of 1960, has shown the problem to be smaller than anticipated, but one that Food & Drug Administration has no intention of ignoring. To prove it, FDA Commissioner George P. Larrick is ordering a broad probe continued until the racket is put out of business. Almost 2,700 samples were collected from 900 drug stores selected at random across the country between January 24, 1960 and March 30, 1961. Of these, nine samples from nine stores were found to be counterfeit, the commission notes.

Another investigation still in progress, involving retailers suspected of handling counterfeit drugs, has revealed that fifty-nine out of 1,020 samples, or 5.8 percent were counterfeit.

**Six Drugs for Sampling**

Six drugs were selected for sampling, all of them known from previous experience to have been counterfeited. They were "Diuril" and "Hydrodiuril" (Merck, Sharpe & Dohme), "Equanil" (Wyeth Laboratories), "Miltown" (Carter Products Company), "Serpasil" (Ciba Pharmaceutical Corporation), and "Meticorten" (Schering Corporation).

Of ninety-one analyses of counterfeit drug samples to date, fourteen samples were found to be slightly below standards of potency generally required of such drugs, and two were substantially below this standard (73 percent and 76 percent of the declared potency of the genuine products).

Most of the counterfeits picked up were identified in the report as having come from General Pharmacal Company, Hoboken, N. J. The firm, along with Lowell Packing Company, Long Island City, N. Y., and eight individuals have been charged with counterfeiting and distributing a variety of drugs, in an action filed in the Newark, N. J., federal court.

Another case, involving counterfeit "Hydrodiuril" manufactured by General Pharmacal Company, was filed in Chicago on March 17, 1961, against Americo Scala, a wholesale distributor for General Pharmacal, and Jules Gertz, salesman for Scala, for delivering the drug to Loyal Drug Company, and Lathrop Pharmacy, retail drug stores, in Chicago.

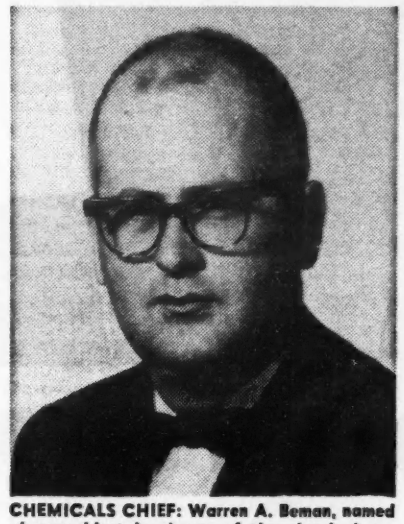
A third criminal action was filed March 10, 1961, in the Boston Federal District Court against Saul H. Bogdanov of Roxbury, Mass., trading as Victory Pharmacal Company. Here again the counterfeits

—Continued on page 48

## Colloway Pigments Enters Nonionic Dispersion Field

Colloway Pigments, a division of General Aniline & Film Corporation, New York, is entering the nonionic pigment dispersion field with a line of free-flowing, nonionic water dispersions for simplified latex emulsion paint formulations.

The company is introducing ten shades said to have superior dispersion and coloring properties for application in latex paints, latex-backed carpeting, vinyl-backed furniture fabrics, and coloring of non-woven materials. Coloration of the resin binder in non-wovens, usually a latex acrylic or styrene-butadiene, is best accomplished with the use of nonionic pastes, GAF points out. Additional applications may be found in adhesives based on polyvinyl acetate.



CHEMICALS CHIEF: Warren A. Beman, named vice-president in charge of the chemical activities of Union Texas Natural Gas Corporation, Houston, Tex.

## Polyolefin Unit Given Baptism by Hercules

Hercules Powder Company is now the proud possessor of a 60-million-pound-a-year polyolefin plant at Lake Charles, La. The unit was dedicated last Thursday (April 6) by Gov. Jimmie H. Davis of Louisiana and Albert E. Forster, president and chairman of the board of Hercules.

Work goes on meanwhile on a second 60-million-pound polyolefin unit at the same location. By 1962, Hercules should have in place capacity to make 200 million pounds annually of high-density polyethylene and polypropylene at Lake Charles and Parlin, N. J.

Initial production at Lake Charles will be confined to polypropylene. Hercules will get its raw material, propylene, from Petroleum Chemicals, Inc., across the street from the new plant.

The company is hoping for fast growth in injection-molded articles, film, rope and other plastics applications, and is also

—Continued on page 48

## Polyethylene Advances Related by Olin, Monsanto

Two developments in polyethylene film and coatings auger greater penetration in the packaging market as well as the industrial market.

Olin Mathieson Chemical Corporation, New York, has just developed what it claims to be the first commercially feasible technic for coating polyethylene on both sides.

Monsanto Chemical Company, St. Louis,

—Continued on page 39

# Benzene's Use In 1961 to Top 531 Million Gals.

US benzene consumption should pass the 531-million-gallon mark this year, according to Business & Defense Services Administration. Total available supply in 1960 (output plus imports) was 497.4 million gallons.

This year, consumption of benzene for synthetic fiber intermediates is expected to jump 20 percent over the 1960 total—to 50 million gallons.

***Benzene Uses: 1961***

| | | |
|---|---|---|
| Phenol (syn.) | 100 | million gals. |
| Styrene | 218 | million gals. |
| Aniline | 17 | million gals. |
| Synthetic fibers | 50 | million gals. |
| DDT | 14 | million gals. |
| Diphenyls | 4.5 | million gals. |
| Maleic anhydride | 15 | million gals. |
| Synthetic detergents | 37.5 | million gals. |
| Di- and monochlorobenzenes | * 16 | million gals. |
| Nitrobenzene | ** 2 | million gals. |
| BHC | 2 | million gals. |
| Miscellaneous | 25 | million gals. |
| Exports | 30 | million gals. |
| Total | 531 | million gals. |

* Excludes that for phenol, aniline and DDT.

** Excludes that for aniline and DDT.

Source: Business and Defense Services Administration.

Other factors responsible for the consumption increase will be exports, styrene, maleic anhydride and aniline, BDSA says. Use of benzene for maleic will rise by 2 million gallons—to an estimated 15 million gallons.

Exports, actually an estimated 23.6 million gallons in 1960, should increase to 30 million gallons in 1961. Consumption for styrene should jump 13 million gallons this year—to 218 million gallons.

BDSA also predicts how production of some key end-products will fare this year. Styrene, output of which was 1.7 billion pounds in 1960, could hit 1.8 billion pounds in 1961.

***Benzene Derivatives Output***

| | 1961 *Estimate* | 1960 *Actual* |
|---|---|---|
| Phenol (syn.) | 730 | 732 |
| Styrene | 1,800 | 1,742 |
| Aniline | 140 | 120 |
| DDT | 145 | 164 |
| Maleic Anhydride | 80 | *70 |
| Dodecylbenzene | 500 | 465 |
| BHC | 25 | 37 |

* Estimate. All other 1960 figures are preliminary totals compiled from Tariff Commission statistics, 1961 figures and Business and Defense Services Administration estimates. All figures in millions of pounds.

Maleic anhydride output, reckoned by BDSA at 70 million pounds in 1960, could top 80 million pounds this year. Some 500 million pounds of dodecyl benzene output is predicted for 1961, up sharply from the actual output of 465.4 million pounds in 1960.

While gains are expected for most benzene end-uses, demand for DDT and BHC is in for a sharp drop, according to the government agency. DDT production will fall to 145 million pounds this year from 163.6 million pounds last year. BHC output will decline to 25 million pounds from 1960's total of 37.4 million pounds.

**OPD Reports From Europe**

# Plastics in Germany: They're Leading the Whole Field

Plastics have taken the lead in the German chemical industry's growth. Last year alone, production was up 25 percent, to 996,000 tons, against a production gain of 14.7 percent for the chemical trade as a whole.

Officials of the German plastic industry, though, are hesitant about forecasting what production will be in 1961, beyond the fairly safe prediction that it will top 1 million tons for the first time.

German Chemical Industry Association statisticians do, however, note a "flattening" of the growth rate in the second half of last year.

German plastics consumption now leads the world on a per capita basis at 26.8 pounds a person a year against 24.6 pounds in the US. This consumption has outstripped domestic production and US firms have been the major beneficiaries, accounting for 38 percent, or $25.6 million, of Germany's total plastic imports of $67.5 million in 1960.

Sales volume figures for the German industry show that plastics have not been immune from the general pressure on prices throughout the world chemical industry. Sales were up 23 percent to $737.5 million, and producers note that the plastics price index is now 94, or 6 percent under the level of 1950.

Plastics, though, did slightly better in matching production and sales volume gains than the chemical industry as a whole, which reports sales up 12 percent to $5.8 billion, while production gained 14.7 percent over 1959.

Biggest gainers among German plastics were the polyolefins, particularly conventional and high density polyethylene with polypropylene just beginning to dent the market, mixed polymers and polyvinyl chloride.

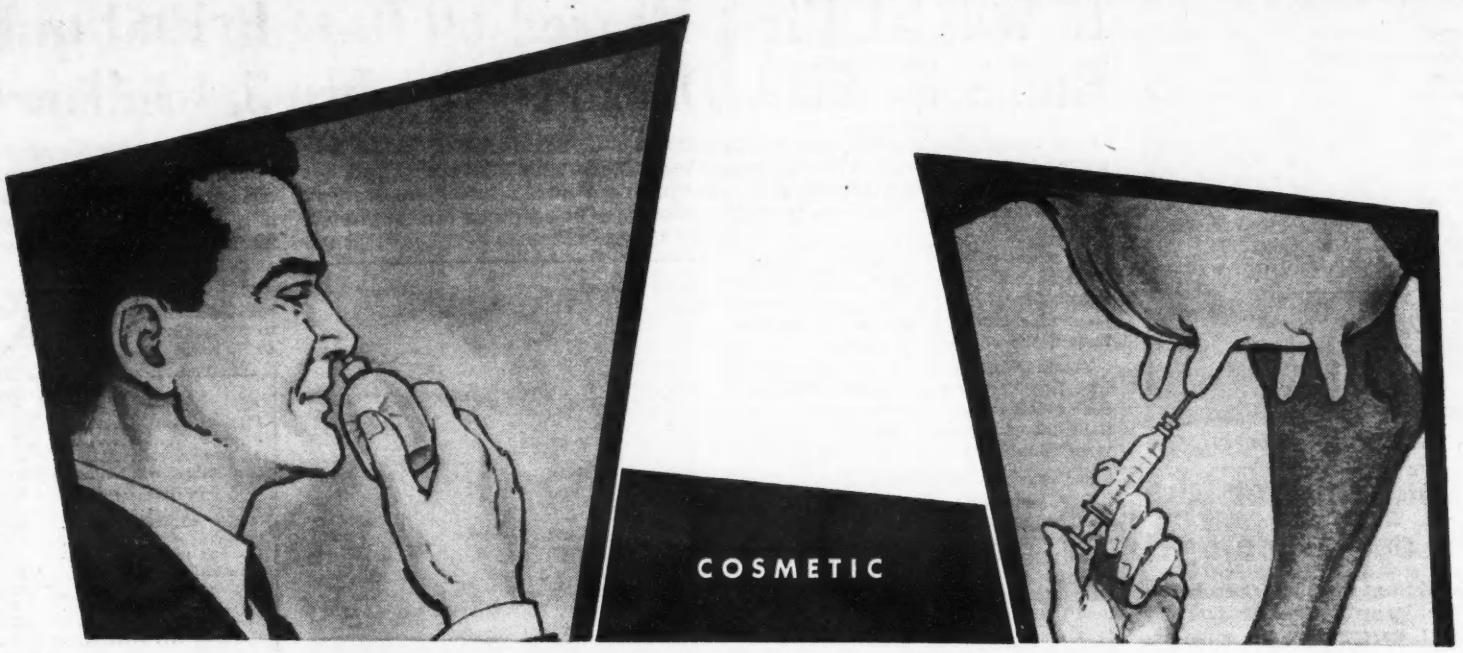
Such plastics based on polymerization rose around 30 percent to 488,000 tons last year, or 49 percent of the total plastic output. Both forms of polyethylene, however, exceeded that gain for polymerization plastics, and polyvinyl chloride

—Continued on page 33

### *Pacific Guano Was Part Of $6.5 Million Package*

Pacific Guano Company, when it went to Collier Carbon & Chemical Corporation recently (OPD, 4/3/61), was part of a package that sold for $6.5 million. The other part was 10.4 acres of industrial real estate in Honolulu.

Announcement of the price was made last week by Union Oil Company of California, which bought the guano firm and then vested ownership in Collier Carbon, a Union Oil subsidiary. Pacific Guano was a wholly-owned subsidiary of Hawaii-based Pacific Chemical & Fertilizer Company.

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# *Nitrogen Plants Needed*

To achieve a planned ninefold increase in its nitrogen production by mid-1966, India will have to put up ten to twelve new nitrogen plants within the next five years.

This recommendation comes from Raymond Ewell, vice-chancellor of the University of Buffalo and consultant on the fertilizer industry for the Ford Foundation. Mr. Ewell has just completed an exhaustive study of the fertilizer situation in India in cooperation with the Indian government.

India has set tentative goals of increasing nitrogen production from 116,000 tons in 1960-61 to 1 million tons in 1965-66, and to possibly 2 million tons five years later, Mr. Ewell points out. The second goal would also require ten or twelve new plants, he feels.

Urea and ammonium phosphate should be given chief emphasis in the country's fertilizer expansion, according to Mr. Ewell's study.

While it is thought that ammonium sulfate, ammonium chloride, ammonium nitrate and nitrophosphates may also have applications in particular situations, they are expected to be of minor importance.

Mr. Ewell also recommends that the Indian government seek greater participation by the private sector of the economy to supplement its own planning and construction effort.

A 16-20-0 mixture (N-P-K), which requires a substantial amount of sulfur, has been found preferable to other types of ammonium phosphates.

Many of the new nitrogen plants

—*Continued on page 54*

# Water Pollution Abatement Work Carrying a Price Tag of $2 Billion

The US needs some 5,200 new sewage treatment plants, plus plant enlargements and additions—costing in all $2 billion—for control of water pollution caused by chemical and other industrial wastes. This is the salient finding of the "most comprehensive survey of municipal water pollution control needs ever undertaken." The survey, completed early this year and reported last week by Public Health Service, covers forty-eight states, the District of Columbia, Puerto Rico and the Virgin Islands.

The $2 billion in projects, plus new ones required by plant obsolescence and population growth, will carry an annual price-tag of about $600 million, according to the survey.

Municipal wastes are now being discharged into the nation's waters from a population of about 42 million, the survey shows, calling for an increase of 40 percent in national construction of sewage treatment facilities.

Since passage of the Federal water pollution control act of 1956—authorizing grants for community waste treatment plants—a total of 2,632 projects has been approved.

Grants amounting to $216 million have been made to support construction costing about $1.3 billion. The federal act allows

—*Continued on page 36*

**EMERY SALES MANAGER: Robert S. Haley, appointed sales manager of the Vopcolene Division of Emery Industries, Inc., in Los Angeles.**

## Dry Color Group to Meet

Dry Color Manufacturers' Association will hold its annual meeting at the Greenbrier hotel, White Sulphur Springs, W. Va., May 31 through June 2.

## ICA Funds to Pakistan For Pesticides, Fertilizers

International Cooperation Administration last week allotted $4,170,000 to Pakistan to purchase pesticides and fertilizers from world sources under the Mutual Security Program.

The allotments consist of $840,000 for potash fertilizers (PA No. 1,001); $1,650,000 for phosphates and phosphatic fertilizer materials (PA No. 1,002); and $1,680,000 for pesticides and agricultural specialties, exclusive of DDT, (PA No. 1,003).

# Chemical Industry Felt Effects Of the '60 Cost-Price Squeeze But Not So Much as Others

Rising costs of doing business, coupled with price cuts on major products, took the chemical industry by the throat last year, squeezing hard on its profit jugular. With a 6 percent decline in its 1960 profits, the industry made a better showing than a lot of other businesses, which were smacked hard by the year-end economic downturn. Still, basic chemicals lagged behind drugs and petroleum, both of which scored profit increases.

In a joint study of industry sales and profits last year, Securities & Exchange Commission and the Federal Trade Commission report sales of chemicals and allied products at $26,972,000,000 in 1960, down 1 percent from $27,133,000,000 in 1959.

**Profits Off Precipitously**

But chemical industry profits after taxes were only $2,011,000, off precipitously from 1959's $2,141,000.

Hardest hit were basic chemicals. Sales amounted to $12,658,000,000, an increase of 3 percent over the 1959 total of $12,312,000,000; but profits were only $1,064,000,000 last year, a drop of 8 percent from 1959's $1,159,000,000.

Drug makers, in contrast, continued to enjoy a relatively stable profit picture as turnover rose.

Sales totaled $3,913,000,000 in 1960, up 5 percent from $3,711,000,000 the year previous; profits after taxes amounted to $388,000,000, for an increase of 2 percent over the $382,000,000 reported for 1959.

Experiences of some of the other industries varied widely from those of the chemical industry. Petroleum refiners reported a 5 percent rise in sales and a 10 percent rise in profits after taxes while the leather industry reported a 4 percent rise in sales but a 23 percent decline in profits.

Hardest hit was the lumber and wood products industry which reported a six percent decline in sales and a 61 percent drop in profits after taxes.

**CHEMICAL DEVELOPMENT CHIEF: John G. Partch, named director of chemical development by the North American Coal Corporation, Cleveland, Ohio.**

## Uranium Carbide Order To Be Filled by Spencer

Spencer Chemical Company has reportedly received the largest single order ever placed for enriched uranium carbide. This material is a new crystalline form of uranium carbide belonging to the family of crystalline fuel materials recently announced by Spencer.

In this crystalline form, the material is suitable for the newer production technics by either compaction or melting and casting into fuel shapes.

The order is for approximately twenty tons of 3.7 percent enriched uranium carbide from the Atomic International Division of North American Aviation. It is reported that this material is destined for use as prototype fuel elements for the sodium graphite reactor being designed by Atomic International at Hallam, Neb.

It is also reported that all future cores for this reactor will be uranium carbide, depending on the service given by the prototype elements.

## Fertilizer Consumption Snaps Winning Streak

Fertilizer consumption declined slightly in the year ended June 30, 1960, breaking a winning streak of many years standing. In a preliminary report from Department of Agriculture, consumption is tallied at 25,022,000 tons, down 290,000 tons from the 25,312,672 tons recorded for the year ended June 30, 1959.

But there were increases in eighteen states and the District of Columbia. In these, 713,000 tons more fertilizer were consumed, totaling 9,605,000 tons or about 38 percent of overall consumption.

California, Florida and Georgia accounted for 526,000 tons of the increase. Consumption declined in thirty-one

—*Continued on page 43*

## Chemists' Club Books Urey

The Chemists' Club Symposiarchs have booked Dr. Harold Clayton Urey, of the University of California, as featured speaker at the dinner meeting called for Thursday, April 13, at the club's New York headquarters. Topic of Dr. Urey's address: "The Moon, the Meteorites and the Origin of the Solar System."

# *Association Meetings*

ACHEMA 1961, German chemical engineering exposition and congress, Frankfurt am Main, Germany, June 9-17.

American Chemical Society, national meeting, Chicago, September 3-8.

American Institute of Chemical Engineers, Sheraton-Cleveland hotel, Cleveland, Ohio, May 7-10.

American Institute of Chemists, annual meeting, Statler hotel, Washington, D. C., May 10-12.

American Oil Chemists' Society, annual meeting, Sheraton-Jefferson hotel, St. Louis, Mo., May 1-3.

American Pharmaceutical Association, annual convention, Sherman hotel, Chicago, April 23-28.

American Society for Testing Materials, annual meeting, Chalfonte-Haddon Hall, Atlantic City, N. J., June 25-30.

**American Society of Perfumers, annual symposium, Essex House, New York, April 13.**

American Zinc Institute, annual meeting, Drake hotel, Chicago, May 1-2.

Animal Health Institute, annual meeting, Mayflower hotel, Washington, D. C., April 24-26.

Association of Food & Drug Officials of the United States, annual conference, Mayflower hotel, Washington, D. C., June 18-23.

Chemical Industries Exposition, Coliseum, New York, November 27-December 1.

Chemical Market Research Association, annual meeting, Plaza hotel, New York, May 17-18.

Chemical Specialties Manufacturers Association, midyear meeting, Drake hotel, Chicago, May 15-17.

**Chemurgic Council, annual conference, Sheraton-Gibson hotel, Cincinnati, Ohio, April 12-14.**

Commercial Chemical Development Association, annual outing, Bedford Springs hotel, Bedford Springs, Pa., May 24-25.

Drug, Chemical & Allied Trades Association, annual meeting, Pocono Manor Inn, Pocono Manor, Pa., September 14-17.

Electrochemical Society, Claypool hotel, Indianapolis, Ind., April 30-May 4.

Federation of Societies for Paint Technology, annual meeting, Shoreham and Sheraton-Park hotels, Washington, D. C., November 2-4.

Lead Industries Association, annual meeting, Drake hotel, Chicago, May 2-3.

Manufacturing Chemists' Association, annual meeting, Greenbrier hotel, White Sulphur Springs, W. Va., June 8-10.

National Agricultural Chemicals Association, annual meeting, Homestead, Hot Springs, Va., October 29-November 1

National Chemical Exposition, sponsored by the Chicago section of the American Chemical Society, International Amphitheater, Chicago, September 5-8.

**National Packaging Exposition, sponsored by American Management Association, Lakefront Exposition Hall, Chicago, April 10-13.**

National Paint, Varnish & Lacquer Association, annual meeting, Statler-Hilton hotel, Washington, D. C., October 30-November 1.

National Petroleum Association, spring meeting, Sheraton hotel, Cleveland, Ohio, April 19-20.

National Plant Food Institute, annual meeting, Greenbrier hotel, White Sulphur Springs, W. Va., June 11-14.

Pharmaceutical Manufacturers Association, annual meeting, Greenbrier hotel, White Sulphur Springs, W. Va., April 30-May 3.

Plastics Exposition, sponsored by the Society of the Plastics Industry, Coliseum, New York, June 5-9.

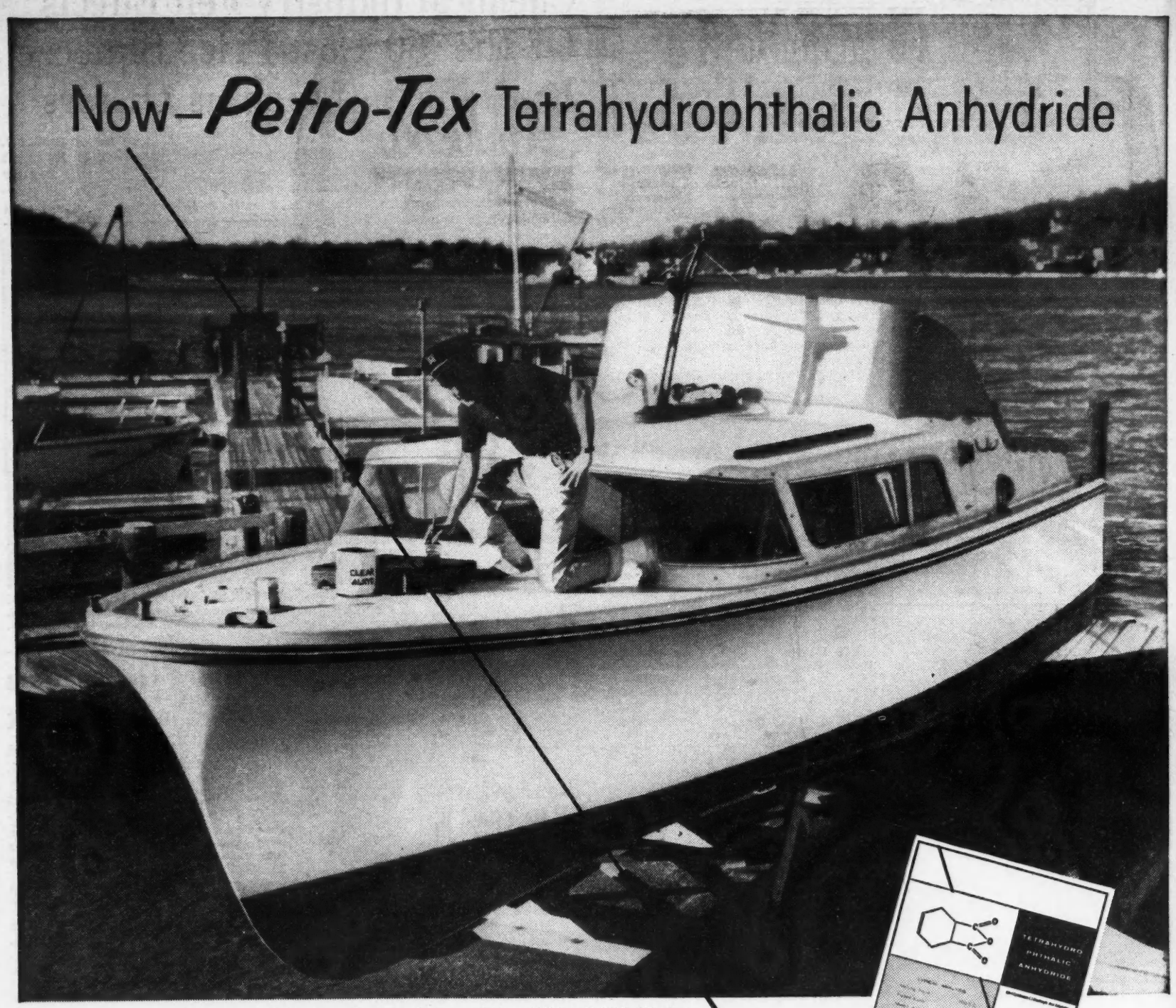
Proprietary Association, annual meeting, Greenbrier hotel, White Sulphur Springs, W. Va., May 14-17.

Society of the Plastics Industry, western section conference, del Coronado hotel, Coronado, Calif., April 26-28; national conference, Commodore hotel, New York, June 5-9.

**Synthetic Organic Chemical Manufacturers Association, monthly luncheon meeting, Roosevelt hotel, New York, April 13.**

Toilet Goods Association, annual convention, Waldorf-Astoria hotel, New York, May 9-11

# Now–*Petro-Tex* Tetrahydrophthalic Anhydride




30′ Pearson Fiberglass Cruiser photographed at White Griffith Marine

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Petro-Tex can currently supply car-load quantities of Tetrahydrophthalic Anhydride in 250# fiber drums.

With major capacity to produce Maleic Anhydride and Butadiene, Petro-Tex will have captive supplies of the two starting components for Tetrahydrophthalic Anhydride.

Write for your copy of our technical data brochure on Petro-Tex Tetrahydrophthalic Anhydride.

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|---|---|---|
| **BUTADIENE** | **n-BUTENE-1** | **DIISOBUTYLENE** |
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# CHEMICALS AND RELATED MATERIALS

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# Current MARKET Quotations

Unless otherwise indicated, listings are first-hand quotations prevailing, according to information and belief, April 7 on large lots, f.o.b. New York, with the lowest in the left-hand column and the highest in the right-hand column. The listings do not represent bid and asked prices nor a range over the week. Differences between high and low may be accounted for by differences in quantity, quality, locality, or individual suppliers' views. An index to the weekly market reports is to be found on page 4.

## A

Abies siberica oil cns ..... lb. 1.90 3.40
Acacia (see Arabic gum).
Acetaldehyde, 99%, dms., c.l., frt. alld lb. .12 - —
dms., t.c.l., frt. alld ..... lb. .13½- —
tanks, frt. alld ..... lb. .10 - —
Acetaldehyde prices 1c. higher in West.
Acetaldol (see Aldol)
Acetanilide, tech., flaked, bbls., bgs., c.l., frt alld lb. .32½- —
bbls., bgs. ton lots, frt alld, lb. .33½- —
bbls., bgs. smaller lots, frt. alld lb. .36½- —
USP bbls. 225-lb dms. any quantity lb. .90 - —
100-lb. dms., any quantity lb. .92 - —
Acetic acid, coml. or redist., 28%, bbls 100 lbs 4.80 - —
56%, bbls. ..... 100 lbs 8.25 - —
70%, bbls. ..... 100 lbs 9.95 - —
80%, bbls. ..... 100 lbs.10.45 - —
Acetic acid, glacial, syn., CP, dms., c.l., dlvd. E 100 lbs. 13.75 - —
tech., dms., c.l., dlvd. E. 100 lbs. 13.75 - —
dms., t.c.l., dlvd. E .. 100 lbs. 15.25 - —
tanks, dlvd. E .. 100 lbs. 10.00 - —
USP, tanks, dlvd. E .. 100 lbs. 13.00 - —
Acetic anhydride aluminum ret. dms., c.l., dlvd. E lb. .16½- —
aluminum ret dms., t.c.l. dlvd E. lb. .18 — —
tanks, dlvd E. lb. .14 — —
Acetic anhydride prices 1c. higher in West.
Acetoacetanilide, fib dms., c.l., dlvd lb. .80 — —
fib dms., t.c.l., dlvd lb. .81 - —
Acetoacet-o-chloroanilide, fib. dms., c.l., dlvd lb. 1.35 - —
fib dms., t.c.l., dlvd lb. 1.36 - —
Acetoacet-o-toluidide, fib. dms., c.l., dlvd lb. .82 - —
fib dms., t.c.l. dlvd lb. .83 - —
Acetone, CP, dms., c.l., dlvd lb. .10½- —
dms., t.c.l., dlvd ..... lb. .12 - —
tanks, dlvd. ..... lb. .08 - —
Acetonitrile, dms., c.l., frt. alld lb. .34½- —
dms., t.c.l., frt. alld lb. .36 - —
tanks, frt. alld ..... lb. .32 - —
Acetophenetidin, USP, powd., 200-lb. dms., 1,000 lbs., frt. alld lb. 1.20 - —
100-lb dms. 1,000 lbs. frt. alld. lb. 1.22 — —
Acetophenone, cns. dms ..... lb. .42 1.30
Tech., dms., c.l., works ..... lb. .47 — —
dms., t.c.l., works ..... lb. .47¼- —
tanks, works ..... lb. .45 - —
N-Acetyl-p-aminophenol, dms., t.l. (min 23,000 lbs.), frt. adjusted lb. 1.30 - —
dms., 1,000-lb. lots, same basis lb. 1.40 - 1.45
dms., 100-lb lots, same basis lb. 1.54 - 1.57
Acetylene black, imp. bgs., c.l., duty and freight extra lb. .20 — —
cs., t.c.l., ex whse lb. .25½- .31
Acetylene tetrabromide, 16-dm. lots or more f.o.b works lb. .53 — —
Acetylsalicylic acid, USP, cryst (20, 40 mesh), powd (80 mesh), 250-lb dms., c.l., pt. of shipt lb. .56¼- —
USP 10% starch granulation, 12-50 mesh, white, 250-lb dms., c.l., same basis lb .56¼ —
(Pink and green granulations 5c. per lb higher.)
Freight equald shipt identical quantity over standard routes, from N.Y., Phila., Midland, Mich., Chicago and St. Louis
Acetyltributyl citrate, tech., non-ret dms. c.l. frt alld. E of Denver lb. .35½- —
non-ret dms., t.c.l., frt. alld E. of Denver lb. .36½- —
tanks frt alld E of Denver. lb. .33 — —
Acetyltriethyl citrate, tech., non-ret. dms. c.l., frt. alld. E. of Denver lb. .39½- —
non-ret dms., t.c.l., frt. alld. E. of Denver lb. .40½- —
tanks, frt. alld. E. of Denver lb. .37 — —

**ACIDS**

**Acid quotations are listed individually. For example, prices on Acid, cresylic, may be found in the C's under Cresylic acid.**

Aconite root, bls lb .50 .55
Acrolein, tech., dms., c.l., works lb .36 — —
dms., t.c.l., works ..... lb. .36¾ - —
tanks, works ..... lb .31 — —
Acrylamide, dms., t.l., f.o.b. works lb. .58 — —
dms., t.t.l., same basis lb. .60 — —
Acrylic acid, glacial, dms., c.l., t.l., dlvd lb. .42½- —
dms., t.c.l., t.t.l., dlvd ..... lb. .43½- —
tanks, dlvd. ..... lb. .40 — —
tech., esterification, tanks, frt alld lb. .38 — —
tech., polymerization, tanks, same basis lb. .38 — —
Acrylonitrile dms. c.l. t.l., frt. equald lb .26 — —
dms. t.c.l., t.t.l., frt. alld ..... lb .27 - —
tanks, frt. equald ..... lb .23 — —

## Abies Siberica Oil—Ammonium Bicarbonate

Adeps lanae (see lanolin).
Adipic acid, bgs., c.l., dlvd..... lb. .32¼- —
bgs., t.c.l., dlvd. ..... lb. .35 — —
Agar, USP Kobe No. 1, strip, bls lb. 3.00 - 3.10
powd., 30 mesh., fib. dms lb. 2.40 - 2.60
dl-Alanine, dms., 100-lbs or more, f.o.b works lb. 5.25 - —
dms. 1-99 lbs., same basis lb.10.00 - —
Aldol, 95%, dms., t.c.l., works lb .28 - —
Aldrin, tech., fib dms. c.l., t.l. dlvd lb .99 - —
fib dms., t.c.l. dlvd lb 1.04 - —

**ALCOHOLS**

**Alcohol quotations are listed individually. For example, prices on Alcohol, furfuryl, may be found in the F's under Furfuryl alcohol.**

Aletris root, bgs lb 1.50 1.75
Algin (see Sodium alginate)
Alizarin (see 1,2-Dihydroxy anthraquinone).
Alkali blue dry, 250-lb. bbls., dlvd E. of Rockies lb. 2.45 - —
Alkali blue prices 1c higher W of Rockies
Allethrin, 90%, dms., frt. alld lb.28.80 -32.90
Soln. 20% dms. 200-2,000 lb lots, frt alld lb 6.50 6.55
2½% dms frt alld. lb .95 1.10
Allspice oil (see Pimento oil).
Allyl alcohol, dms., c.l. dlvd..... lb. .32½- —
dms., t.c.l., dlvd. ..... lb .34 - —
tanks, dlvd. ..... lb .30 - —
Allyl bromide 55-lb cbys 5,005 lbs or more, works lb 1.50 - —
55-lb cbys., 1,045 to 4,— lbs works lb. 1.55 - —
55-lb cbys., 55 to 990 lbs work lb. 1.60 - —
Allyl chloride, dms., c.l., dlvd lb 17½- —
dms., t.c.l., dlvd ..... lb .19 - —
tanks, dlvd ..... lb. .15 - —
Allyl isothiocyanate (see Mustard Oil, syn.).
Almond oil, artif, bitter (see Benzaldehyde)
Almond oil, nat. bitter, f.p.a. bots. lb 2.75 3.45
NF, bots. lb 3.00 3.30
sweet, USP, cns., dms..... lb .70 .70
Aloe, Cape, cs. ..... lb. .33 .40
powd., cs. ..... lb .60 .65
Curacao, kgs. ..... lb .75 — —
powd., kgs. ..... lb .85 — —

## Abbreviations

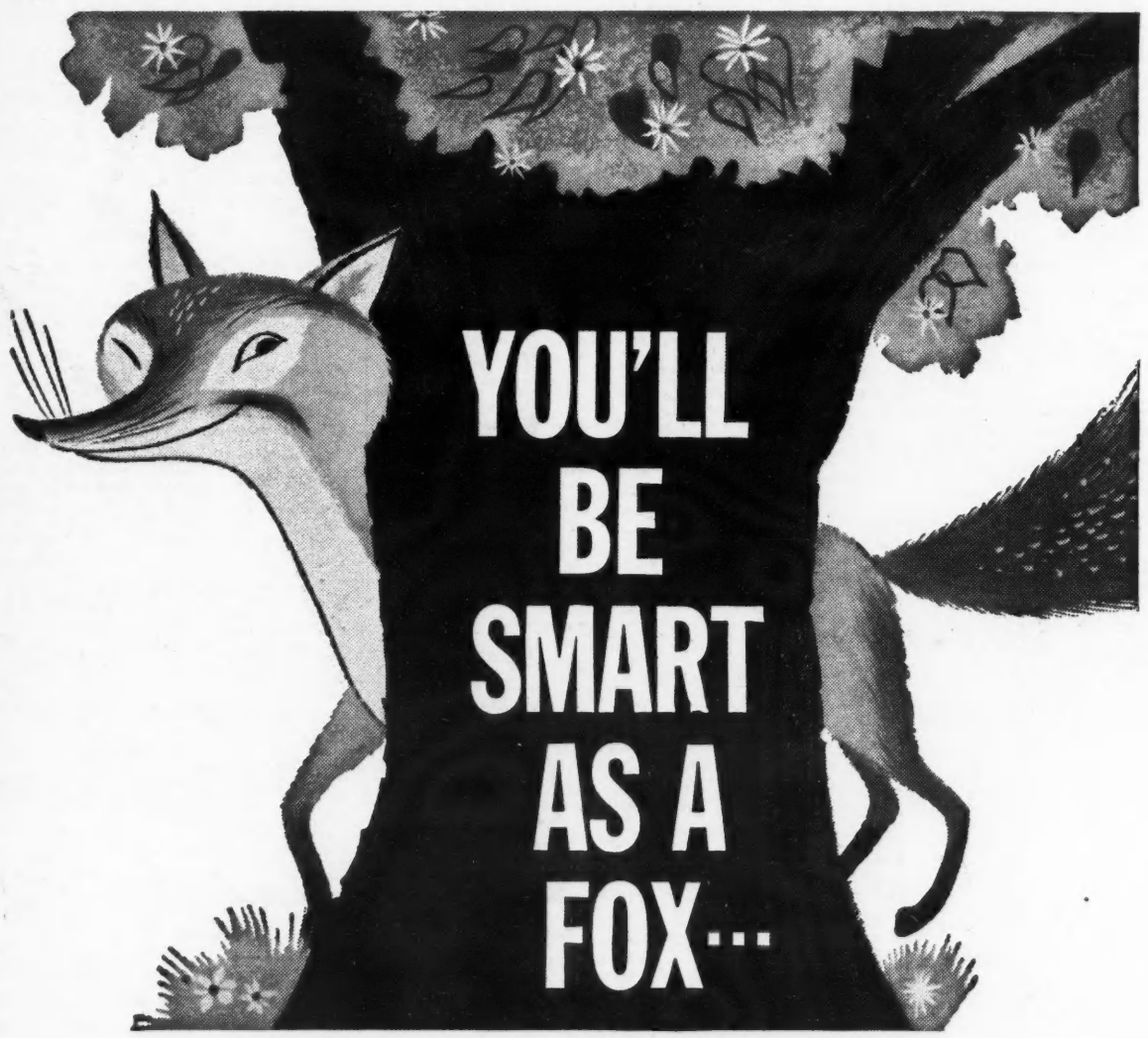
### Used in OPD Market Quotations

| | | | | | |
|---|---|---|---|---|---|
| alld. | allowed | distr. | distributor | No. | number |
| amorph. | amorphous | djns. | demijohns | nom. | nominal |
| AMP | American melting point | dlvd. | delivered | o- | ortho |
| anhyd. | anhydrous | dms. | drums | ord. | ordinary |
| AOAC | Association of Official Agricultural Chemists | dom. | domestic | oz | ounce |
| | | E. | east | p- | para |
| | | e.p. | end point | Pac | Pacific |
| a.p.a. | available phosphoric acid | equald. | equalized | pf | proof |
| | | exp. | expressed | phos. | phosphate |
| approx. | approximately | Ext. | external | photo. | photographic |
| artif. | artificial | F | fahrenheit | pkgs. | packages |
| ASTM | American Society for Testing Materials | ferment. | fermentation | powd. | powdered |
| | | f.f.a. | free fatty acid | precip. | precipitated |
| | | f.f.c. | free from chlorine | prod. | producer |
| Atl. | Atlantic | fib. | fiber | pt | point |
| Be. | Baume | f.o.b. | free on board | pulv. | pulverized |
| bbls. | barrels | f.p.a. | free of prussic acid | purif. | purified |
| bgs. | bags | frt. | freight | redist. | redistilled |
| bls. | bales | gal. | gallon | refd. | refined |
| bots. | bottles | gran. | granular | refy. | refinery |
| b.p. | boiling point | grd. | ground | reg. | regular |
| b.p.l. | bone phosphate of lime | i.&a. | iron and aluminum | resub. | resublimed |
| | | i.b.p. | initial boiling point | ret. | returnable |
| b.r. | boiling range | imp. | imported | SD | specially denatured |
| bxs. | boxes | incl. | included | s.d. | single distilled |
| C. | centigrade | indust. | industrial | S.E. | southeast |
| cbys. | carboys | kgs. | kegs | sec. | secondary |
| CD | completely denatured | l- | laevo | secs | seconds |
| c.i.f. | cost, insurance, freight | lacq. | lacquer | s.g. | specific gravity |
| | | lb. | pound | shipt. | shipment |
| cks. | casks | l.c.l. | less carlots | soln. | solution |
| c.l. | carlots | l.t.l. | less truckload | s.u. | standard unit |
| cns. | cans | liq. | liquid | syn. | synthetic |
| coml. | commercial | mfrs. | manufacturers | tanks. | railroad tankcars |
| conc. | concentrated | m- | meta | tech. | technical |
| CP | chemically pure | m.a.p. | mixed aniline point | tert- | tertiary |
| cps. | centipoises | min. | minimum | t.l. | truckloads |
| cryst. | crystalline | m.p. | melting point | t.w. | tankwagons |
| cs | cases | N- | nitrogen | USP | U. S. Pharmacopoeia |
| ctns. | cartons | n- | normal | vis. | viscosity |
| cyls. | cylinders | nat. | natural | VM&P | varnish makers & painters |
| d- | dextro | neut | neutral | W. | west |
| dbl. | double | NF | National Formulary | whse. | warehouse |
| denat. | denatured | NNR | New and Nonofficial Remedies | w.w | water-white |
| dest-dist. | destructively—distilled | | | | |
| dl- | dextro-laevo | | | | |
| dist. | distilled | | | | |

A unit-ton is 2,000 pounds of 1 percent of the basic constituent or other standard of the material. The percentage figure of the basic constituent multiplied by the price figure shown gives the price of 2,000 pounds of the material.

Alois, USP bbls., dms., kgs lb 2.35 2.90
Alphanaphthol (see a-Naphthol)
Alphanaphthylamine (see a-Naphthylamine)
Alphanitronaphthalene (see a-Nitronaphthalene).
Alphapicoline (see a-Picoline).
Alphaterpineol (see a-Terpineol).
Alphatocopherol (see a-Tocopherol).
Alum, ammonium, gran. bgs., works 100 lbs 4.30 — —
Lump, dms. works 100 lbs 5.05 — —
Powd. dms. works 100 lbs 5.20 — —
USP, burnt., dms ..... lb .20 .21
hydrous, dms lb .07¾ .08
Alum, potassium, gran. bgs. works 100 lbs 4.55 — —
Lump, dms., works 100 lbs 5.30 — —
Powd. dms., works 100 lbs 5.45 — —
USP, burnt., dms lb .20 .21
USP, hydrous, dms lb .07¾ .08
Alum, potash-chrome, dms lb .17 — —
Alumina, calcined, bgs. c.l. works lb .0535 — —
bgs., t.c.l., works ..... lb .056 .0835
Aluminum acetate, basic soln., 24%, bbls t.c.l. works lb .14 — —
Aluminum chloride, coml., anhyd. dms., c.l., works frt equald lb .15 — —
dms. t.c.l. works lb .16½ — —
cryst. dms. c.l. works 100 lbs 21.00 — —
dms., t.c.l. works 100 lbs 21.50 — —
Soln., 32° cbys. c.l., works lb .0495 — —
cbys., t.c.l., works lb .0570 .1095
tanks, works 100 lbs 3.95 — —
NF, gran. dms. works lb .31 .39
Aluminum fluoride, tech., anhyd., bgs. c.l. works lb .16¼ — —
bgs., t.c.l. works lb .17¼ .19¼
bulk, c.l. basis 80% lb .14½ — —
Aluminum fluoride in fib dms 0.35c per lb higher
Aluminum formate, basic soln. containers extra c.l. works 100 lbs 11.00 — —
containers extra t.c.l. works 100 lbs 11.50 — —
Aluminum hydrate, heavy, bgs., c.l., frt. equald lb. .0370 — —
bgs., 20,000-40,000 lb. lots, same basis lb. .0395 — —
bgs., 2,000-20,000 lb. lots, same basis lb. .0495 — —
bulk, c.l., same basis lb. .0330 — —
Light, bgs., c.l., t.l., works ..... lb. .09½ — —
bgs., t.l., to c.l., works ..... lb. .10½ — —
bgs., t.t.l., works ..... lb. .11½ — —
Aluminum hydroxide, dried USP XV fib dms. works lb 82½ — —
fib dms., contract, works lb 79½ — —
Aluminum hydroxide, gel, pharmaceutical, 14-15% $Al_2O_3$, fib dms., works lb .22 — —
9-9½% $Al_2O_3$, fib dms. works. lb .19 — —
fib dms. contract works lb. .18 — —
Aluminum hydroxide, tech. powd., (see Aluminum hydrate)
Aluminum metal, 99½% + 30-lb ingots, 10,000-lb lots, frt. alld lb .2810 — —
50-lb pigs 10,000-lb lots frt alld lb .26 — —
Aluminum oxide, amorphous (see Alumina, calcined)
Aluminum paste, lining, extra-fine, dms lb. .71 — —
Standard grade, dms lb .48½ — —
Aluminum powder, lining, extra-fine, dms lb 1.13 — —
Standard grade, dms lb .83 — —
Aluminum paste and powder prices are f.o.b. shipping point. Add 1c per lb for 100-lb dm., 1½c per lb for 50-lb dm., 3c per lb for 10 lb can and 5c to 12c per lb for smaller containers. Deduct 1c per lb for single shipment of 400 to 1,499 lbs., 2c for 1,500 to 4,999 lbs., 3c for 5,000 to 29,999 lbs and 4c for 30,000 lbs or more. Where destination is within the continental U. S. a deduction equivalent to the lowest available common carrier transportation rate will be made from seller's invoice on orders of 200 lbs. or more.
Aluminum resinate, precip., 2.1% Al, dms lb. .45 — —
Aluminum stearate, d.p.s.t., c.l. lb .39 —
ctns., t.c.l. lb .40 .44
Monobasic, ctns., c.l. ..... lb .39 —
ctns., t.c.l. ..... lb .40 .44
Tribasic, ctns. c.l. ..... lb .39 —
ctns., t.c.l. lb .40 .44
Aluminum sulfate, coml., grd., bgs c.l., works, frt equald ton.41.00 — —
bulk c.l., same basis ton.40.00 — —
lump, bgs., c.l., same basis ton.44.00 — —
iron-free, bgs. c.l., works, frt equald 100 lbs 3.80 — —
bgs. t.c.l., works, frt equald 100 lbs 4.30 8.30
USP, gran., 400-lb dm., works lb .30 — —
USP, powd., dms. works lb .27 — —
Aluminum sulfate prices $1 per ton higher in the South
Aluminum trihydrate, heavy (see Aluminum hydrate, heavy).
Ambergris, gray, bots oz. 6.50 10.00
p-Aminoacetanilide, tech., paste, dms., frt alld lb 1.57 — —
Aminoacetic acid, NF, bbls., frt. adjusted lb 1.35 1.60
Aminoazotoluene base, bbl 400 lb basis lb. 1.15 1.18
p-Aminobenzoic acid, tech., dms., works lb 1.72 —
2-Amino-4-chlorophenol (see 4-Chloro-2-aminophenol)
p-Aminodiphenylamine (see Solo), dms., frt. alld lb 2.15 3.85
Aminoethyl ethanolamine, dms., c.l., dlvd lb. .475 — —
dms., t.c.l., dlvd lb .49 — —
tanks, dlvd. lb. .45 — —
2-Amino-2-methyl-1-propanol, dms., c.l., frt. alld lb. .44 — —
dms., t.c.l. frt. alld. lb .45 — —
tanks, frt. alld. lb .42 — —
m-Aminophenol, dist., dms., ton lots. lb 2.05 — —
dms smaller lots. lbs 2.50 — —
p-Aminophenol, dms., frt. alld. lb 1.15 — —
Aminophylline, USP, 100-lb. dm., frt alld lb 3.25 — —
p-Aminosalicylic acid, dms., 100 lbs. or more, frt. adjusted lb 3.40 — —
Ammonia, anhyd., fertilizer, tanks, works, frt equald E. of Rockies ton.92.00 — —
refrigeration, tanks, works, frt equald E. of Rockies ton.94.50 — —
Aqueous, 29.4%, tanks, works, anhyd basis, E. of Rockies ton.95.00 — —
Ammoniacal liquor (see Ammonia, aqueous)
Ammoniac, sal., gray, bgs., c.l. works, frt. equald 100 lbs 8.25 — —
bgs. t.c.l., same basis 100 lbs. 8.65 12.65
Ammoniac, sal., white (see Ammonium chloride, tech.)
Ammonium acetate, purif., dms lb .40 — —
Ammonium benzoate, USP, 100-lb. dms., 1,000-lb lots, works lb. 1.90 — —
Ammonium biborate, gran., dms., c.l., works ton 325 — —
dms., ton lots, ex whse 100 lbs.22.86 — —
dms., smaller lots, ex whse 100 lbs.24.11 — —
Ammonium bicarbonate, dom., dms., c.l., works 100 lbs. 7.50 - — —
dms., t.c.l., works ..... 100 lbs. 9.50 — —

Ammonium bichromate, dms., works lb. .43 .43
Ammonium bifluoride dms., dlvd lb. .2145- .2245
Ammonium bromide, NF, gran., dms, c.l. t.l. frt equald lb. .44 - —
dms t.c.l. same basis lb. .46 - —
Ammonium carbonate USP lump, dms c.l lb. .15½- —
Ammonium chloride, white tech., fine gran. bgs. c.l. works 100 lbs 6.00 —
bgs. t.c.l. works 100 lbs 8.00 8.45
USP gran. 250 lb dm lb .17¼ —
Ammonium citrate dibasic 250-lb dm f.o.b works lb .77 - —
Ammonium dichromate (see Ammonium bichromate)
Ammonium fluoride (see Ammonium bifluoride)
Ammonium gluconate tech. 200-lb dm f.o.b works E lb. .45 - —
Ammonium hydroxide (see Ammonia aqeous)
Ammonium iodide, NF, 25-lb. jar, f.o.b. works lb. 4.51 - —
Ammonium lauryl sulfate, dms., c.l., frt alld lb. .20½- —
dms. t.t.l. frt. alld lb .21½- —
tanks frt alld lb. .19½- —
Ammonium lignin sulfonate, bgs., c.l. works 100 lbs 3.25 —
bgs. t.c.l., works 100 lbs 3.40 3.65
Ammonium linoleate, 80%, dms., works lb. .50 .55
Ammonium molybdate, CP, cryst., 400 lb dms. 15,000-lbs works lb. 1.22 - —
400-lb dms., 2,000-lb contracts, works lb 1.23 - —
400-lb dms., works lb. 1.24 - —
Ammonium nitrate, dom., fertilizer grade 33.5% N. bgs. f.o.b works ton.67.00 - —
Ammonium nitrate, dom., with dolomite 20.5% N, bgs., c.l., Hopewell, Va ton.48.00 - —
imp., Canadian, 33.5% N, eastern, bgs., c.l., ship't point frt. equald to $3 ton base price ton.70.00 - —
Ammonium oxalate, tech., fine gran., 250-lb dm, f.o.b works E lb. .28½- —
Tech. powd. 200-lb dm., same basis lb .28½- —
Ammonium pentaborate, gran. bgs., c.l. works ton 193.00 —
bgs., ton lots, ex whse 100 lbs.15.27 - —
bgs. smaller lots, ex whse 100 lbs.16.52 -18.52
Ammonium pentaborate powder $10 per ton higher in bags
Ammonium persulfate, tech., dms., 10-ton lots or more, works lb. .18 - —
dms. smaller lots, works lb. .20 - .23
Ammonium phosphate, comi., bgs., c.l., works, frt. equald lb. .09¼- —
bgs. t.c.l., same basis lb. .10 - —
Dibasic, NF, V, bbls., dms lb. .46 - —
Dibasic, tech., bgs., c.l., works, frt. alld lb. .09¼- —
Ammonium silicofluoride, dms., works lb. .13¼- .13¾
Ammonium sulfamate, bgs., c.l., t.l., works lb. .19 - —
bgs., t.c.l., works lb. .20½- .21
Ammonium sulfate, standard granular, bulk, f.o.b works, base price ton.32.00 - —
Ammonium sulfate, standard, gran., purif., c.l., 100-lb. bgs., f.o.b. works lb. .08½- —
Large granular, bulk, c.l., works ton.35.00 - —
bgs., c.l., works ton.40.00 - —
Tech., bulk, c.l., t.l., works ton.52.00 - —
bgs., c.l., t.l., works ton.56.00 - —
bgs., t.c.l. t.t.l. works 100 lbs. 3.20 5.20
Ammonium sulfide, liq., 40-44%, tanks, frt equald., 100% basis, ton.160.00 - —
Ammonium sulfocyanide, tech. (see Ammonium thiocyanate).
Ammonium thiocyanate, tech., cryst. dms., c.l., works lb. .20 - —
dms. t.c.l. works lb. .22 .26
Tech, soln., 50%, tanks, frt. equald., basis ammonium thiocyanate content lb. .17¼- —
Ammonium thioglycolate, comi., 55-gal. dms., ton lots, 100% basis lb 1.15 - —
d-Amphetamine hydrochloride, monobasic, dms lb.17.50 -23.50
dl-Amphetamine hydrochloride, dibasic dms lb. 4.50 - 6.00
d-Amphetamine phosphate, fib. dms., 100-lb. lots lb.15.00 - —
dl-Amphetamine phosphate, dms.lb. 4.20 5.60
d-Amphetamine sulfate, fib. dms, lb.15.00 -17.00
dl-Amphetamine sulfate, fib. dms., lb. 4.20 5.60
Amyl acetate, ex fusel oil, tech., dist., from 125° to 150°C., dms., c.l., frt alld. E of Rockies lb. .18½- .19
dms., t.c.l., same basis lb. .20 - .20½
tanks, same basis lb. .16 .16½
Amyl acetate, ex pentane, reg., dms., c.l., dlvd lb. .19 - —
dms., t.c.l., dlvd. lb. .21¾- —
tanks, dlvd. lb. .16½- —
tech., dms., c.l. dlvd. lb. .17 - —
dms., t.c.l., dlvd. lb. .18½- —
tanks, dlvd. lb. .14½- —
Amyl acetate, syn., oxo process, dms., c.l., dlvd lb. .19 - —
dms., c.l. dlvd. lb. .20½- —
tanks, dlvd. lb. .16½- —
Amyl alcohol, ex fusel oil (see Fusel oil refd).
Amyl alcohol, ferment, refd., 128°-132°C., dms., t.c.l., dlvd lb. .43½- —
refd., ACS grade, dms., t.c.l., dlvd lb. .45½- —
ex pentane, mixed amyls, dms., c.l., frt. alld lb. .19 - —
dms., t.c.l. frt. alld lb. .20½- —
tanks, frt. alld. lb. .16½- —
Amyl alcohol, primary, dms., c.l., frt. alld lb. .20¼- —
dms., t.c.l. frt. alld lb. .21¾- —
tanks, frt. alld lb. .17¾- —
Sec-synthetic dms., c.l., works, frt. alld lb. .19 - —
dms., t.c.l., same basis lb. .20½- —
tanks, same basis lb. .17 - —
Tert-synthetic, dms., c.l., frt. alld. E lb. .17 - —
dms., t.c.l., frt. alld. E. lb. .18½- —
tanks, frt. alld E. lb. .14½- —
Amyl alcohol, 1-pentanol (syn. normal), dms., c.l., works lb. .41½- —
dms., t.c.l., works lb. .43 - —
tanks, works lb. .39½- —
2-pentanol, dms., c.l., works lb. .65 - —
dms., t.c.l., works lb. .70 - —
tanks, works lb. .60 - —
Amyl n-butyrate, dms. lb. 1.00 1.25
Amyl cinnamic aldehyde, dms lb. 1.70 2.20
p-tert Amyl phenol, dms., c.l., works, lb. .28 - —
dms., t.c.l., works lb. .29 - —
Amyl salicylate, ens., dms. lb. .71 - —
Amyris oil, dms lb. 1.50 - —
Anethol, tech., dms. lb. .80 .92
USP, ens., dms. lb. 1.05 —
Angelica root, bls lb .0 - 1.00
Angelica root oil, bots lb. 120.00 -140.00
Angelica seed oil, bots lb 120.00 -130.00
Aniline dms, c.l., frt. alld lb .20 - —
dms., t.c.l., frt. alld. lb. .21 - —
tanks, frt alld lb. .18 - —
Aniline oil (see Aniline)
Aniline salt dms., c.l. t.l., 20,000 lbs. min., frt. alld lb. .33 - —
dms., t.c.l., same basis lb. .35 - —
Anise oil, USP, dms lb. 1.90 - 3.00
Anise seed, Turkish, bgs. lb. .24 - —
Spanish, bgs. lb. .28 - —
Anisic aldehyde, dms lb. 1.50 2.20
o-Anisidine, dms., c.l., frt. alld lb. .80 —
dms., t.c.l., same basis lb. .82 - —
tanks, same basis lb. .72 - —
p-Anisidine, dms., works lb. .97 —
Anthracene, 90-95%, dms., c.l., t.l. f.o.b., works lb. .42½- —
dms, t.c.l., minimum shipment 1,000 lbs., same basis lb. .45 - —
Anthranilic acid, 99% 150-lb dms., dlvd lb. 1.15 - —
Anthraquinone, 99.5% bgs., c.l., frt alld lb. .70 - —
bbls., t.c.l., same basis lb. .73 - —
Electrical grade, bgs. t.c.l., same basis lb 1.10 —
Antimony butter (see Antimony trichloride).
Antimony metal, bulk, c.l., mines. lb. .32½- —
cs., c.l., mines lb. .33 - —
Antimony oxide, bgs., c.l., frt. alld. lb. .26½- .30
bgs., t.c.l., frt. alld. lb. .28 - .31½
Prices of antimony oxide are 2% higher west of the Rockies.
Antimony sulfide, approx. 65%, bgs., 10,000-lb. lots, dlvd lb. .23 —
bgs., smaller lots, dlvd lb. .24 .26
Antimony trichloride, anhyd., solid, pails, c.l., works lb. .41 - —
pails, t.c.l., works lb. .43 - —
Antimony-potassium tartrate, tech., powd., 250-lb., dm., f.o.b. works, E lb. .69½- —
USP, powd., 250-lb dm., same basis lb. 74½- —
Apomorphine hydrochloride, USP, bots., 25-oz. lots oz.35.60 - —
Apricot kernel oil, USP, dms lb. .55 .70
Arabic gum, amber sorts, 10 bgs. lb. .21 - .23
USP, powd., bbls lb. .27 - .30
Areca nuts, powd., bbls lb. .18 - .20
Arecoline hydrobromide, NF, bots., tins, 100 oz. or more oz. 4.00 - —
l-Arginine, free base, dms., 10-kilo lots or more kilo.90.00 - —
l-Arginine glutamate, dms., 10-kilo lots or more kilo.64.80 - —
l-Arginine monohydrochloride, dms., 10-kilo lots or more kilo.60.00 - —
Arnica flowers (true Montana), bls. lb. .75 —
Aromatic petroleum solvents (see Solvent Naphtha, petroleum, aromatic).
Arsenic, crude (95%), bulk, c.l., works lb. .016 - —
bbls., c.l., works lb. .0.31 - —
Arsenic trioxide, NF, powd., dms., 300-lbs., f.o.b. works lb. .48 - —
Arsenic, white, powd., bbls., c.l., works lb. .04½- —
bbls., t.c.l. works lb .06½- .07½
Arsenous acid, tech. (see Arsenic, white).
Arsenous acid, USP (see Arsenic trioxide).
Arylid maroons, deep shades, bbls. lb. 3.70 - —
Light shades, bbls. lb. 2.85 - —
Asafetida gum, ens lb. .36 - .40
Powd., bbls., dms lb .75 - .80
Asbestine (see Talc, fibrous, New York).
Asbestos, Canadian crude
6D, c.l. (30 tons), mines ton.80.00 - —
7D, c.l. (30 tons), mines ton.75.00 - —
7F, c.l. (30 tons), mines ton.71.00 - —
7H, c.l. (30 tons), mines ton.61.00 - —
7K, c.l. (30 tons), mines ton.50.00 - —
7M, c.l. (30 tons), mines ton.44.00 - —
7R, c.l. (30 tons), mines ton.43.00 - —
7RF, c.l. (30 tons), mines ton.44.00 - —
7T, c.l. (30 tons), mines ton.41.00 - —
7TF, c.l. (30 tons) mines ton.44.00 - —
Asbestos prices are in Canadian funds; t.c.l. lots $4 per ton higher
Ascorbic acid, USP, dms., 100-kilos. kilo. 6.80 - —
dms., less than 100-kilos kilo. 7.05 - 7.80
Ash, black (see Barium sulfide)
Asphalt, gilsonite, black jet, bgs., c.l., mines ton.43.00 - —
ex-whse, 5 tons or more, N. Y., N. J ton.89.50 - —
select, brilliant black, 340°-360°F fusing pt., bgs., c.l., mines. ton.46.00 - —
270°-295°F fusing pt., bgs., c.l., mines ton.43.00 - —
petroleum, cut-back, tanks, tank-wagon, refy gal. .09½- —
emulsion, tanks, tankwagon refy gal. 09½ - —
steam-refd., 50-80 penetration, tanks, tankwagon refy ton.21.00 —
85-300 penetration, tanks, tank-wagon, refy ton.20.00 - —

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★ *Ethyl Aldohol* ★ *Butyl Chloride* ★ *Acetic Acid*
★ *Ethyl Acetate* ★ *Isoamyl Alcohol* ★ *Amyl Acetate*
★ *Butyl Alcohol* ★ *Acetone* ★ *Refined Fusel Oil*
★ *Butyl Acetate* ★ *Acetaldehyde* ★ *Proprietary Solvent*
★ *THERMICE brand of $CO_2$ (gas, liquid, solid)*

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*PUBLICKER ALCOHOL & CHEMICAL SALES CORP.*
PHILADELPHIA—LOCUST 4-1400 • NEW YORK—OXFORD 5-4160
BOSTON—HOMESTEAD 9-0022
*MIDWESTERN DISTRIBUTORS, PUBLICKER CHEMICAL CORP.*
CHICAGO—RANDOLPH 6-1557-8-9 • ST. LOUIS—PROSPECT 6-0858
NEW ORLEANS—FILLMORE 7-1468

| | | | |
|---|---|---|---|
| Aspirin (see Acetylsalicylic Acid). | | | |
| Atropine, NF, tins | oz. | 6.50 | 7.50 |
| Atropine sulfate USP, bots | oz. | 5.25 | 5.75 |
| Azelaic acid, bgs., c.l., dlvd. | lb. | .40 | — |
| bgs., ton lots, same basis | lb. | .41 | — |

## B

| | | | |
|---|---|---|---|
| Bacitracin, sterile, over 500,000,000 units | | .90 | — |
| non-sterile, over 500,000,000 units, 50,000 units | | .65 | — |
| Balm of Gilead buds, dried, bgs | lb. | 1.25 | 1.35 |
| Barberry root bark, bgs | lb. | 1.00 | 1.10 |
| Barbital, NF 100-lb dms., f.o.b. works | lb. | 4.50 | — |
| Barbital sodium, NF, 100-lb dms. | lb. | 4.75 | — |
| Barium carbonate, precip., bgs., c.l., works | ton. | 111.50 | — |
| bgs., smaller lots, works | ton. | 126.50 | — |
| Barium chlorate, dms., works | lb. | .32 | .41 |
| Barium chloride anhyd., bgs., c.l., works | ton. | 176.00 | — |
| bgs., t.c.l., works | ton. | 196.00 | — |
| NF, cryst., dms., 400-lbs., works | lb. | .23 | — |
| Tech., cryst., bgs. c.l., works, 100 lbs. | | 7.00 | — |
| bgs., t.c.l. works 100 lbs. | | 8.00 | — |
| Barium chromate, bgs. frt. equald. | lb. | .38 | — |
| Barium dioxide (see Barium peroxide). | | | |
| Barium hydrate, cryst., bgs., c.l., t.l., frt. equald | ton. | 208.00 | — |
| bgs., t.c.l., t.l. frt equald | ton. | 218.00 | — |
| Barium monohydrate, 99%, bgs., c.l. frt. equald 100 lbs. | | 11.25 | — |
| bgs., t.c.l., frt. equald 100 lbs. | | 11.75 | — |
| Barium monoxide (see Barium oxide). | | | |
| Barium nitrate bbls. c.l., t.l. dlvd | lb. | .16 | — |
| bbls., t.c.l., t.l., dlvd. | lb. | .17 | — |
| Barium oxide, grd. dms., c.l., t.l., frt equald | ton. | 275.00 | — |
| dms. t.c.l., t.l. frt equald | ton. | 285.00 | — |
| Barium peroxide, dms. frt. equald. | lb | .20 | — |
| Barium stearate, ctns. c.l., frt. alld. | lb | .41 | — |
| ctns. t.c.l. same basis | lb. | .42 | .46 |
| Barium sulfate, tech (see Barytes and blanc fixe). | | | |
| Barium sulfate, X-ray, 100-lb dm. | lb. | .19 | — |
| Barium sulfide, dms., c.l., works. | ton. | 100.00 | — |
| dms., t.c.l., works | ton. | 110.00 | — |
| Barytes, southern off-color, bgs. mines | ton | 30.00 | — |
| 95-75%, bgs., mines | ton. | 30.00 | — |
| white, water-grd paper bgs. c.l. St. Louis | ton. | 60.00 | 60.25 |
| paper bgs. ex whse New York | ton. | 84.85 | — |
| Battery acid, cbys., c.l., works E. 100 lbs | | 2.35 | — |
| cbys, t.c.l., works, E. 100 lbs. | | 2.65 | 10.95 |
| Bauxite, bulk, mines | ton | 7.00 | 10.00 |
| Bay oil NF Puerto Rican 50-55%, cns | lb. | 3.25 | — |
| 55-60%, cns. | lb. | 3.60 | — |
| NF, West Indian, 50-55%, cns. dms. | lb. | 4.25 | 4.50 |
| Bayberry wax, bgs | lb. | .65 | .70 |
| Beeswax, crude, African, bgs. | lb. | .54 | .55 |
| Brazilian, bgs. | lb. | .58 | .59 |
| Central American, bgs. | lb. | .57 | .58 |
| Chilean, bgs | lb. | .59 | Nom |
| Refd. USP bleached white, bricks 100-lb. ctns | lb. | .67 | .69 |
| white, slabs, 100-lb. ctns | lb. | .66 | .68 |
| yellow, bricks, 100-lb ctns | lb | .59 | .61 |
| yellow slabs, 100-lb ctns | lb | .58 | .60 |
| Belladonna leaf, bls. | lb. | .24 | .26 |
| Belladonna root, bls | lb. | .35 | .38 |
| Bentonite, dom 200 mesh, bgs., c.l., mines | ton. | 14.00 | — |
| Imp. Italian, white, high gel., bgs., 5-ton lots, ex whse | ton. | 95.20 | — |
| bgs., 1-ton lots, ex whse | ton. | 99.00 | — |
| Imp. Italian, white, low gel., bgs., 5-ton lots, ex whse | ton. | 93.40 | — |
| bgs., 1-ton lots ex whse | ton. | 97.16 | — |
| Benzal chloride cbys., works | lb. | .44 | — |
| Benzaldehyde, NF, dms. | lb. | .74 | — |
| Tech., dms., c.l., t.l. | lb. | .42 | — |
| dms., t.c.l. | lb. | .44 | — |
| Benzene, pure or nitration, tanks, works: Baton Rouge, La | gal. | .34 | — |
| Bethlehem, Pa | gal. | .34 | — |
| Birmingham district | gal. | .34 | — |
| Chicago district | gal. | .34 | — |
| Cleveland district | gal. | .34 | — |
| Geneva, Utah | gal. | .34 | — |
| Houston, Tex. | gal. | .34 | .40 |
| Johnstown Pa | gal. | .34 | — |
| Benzene, pure or nitration, tanks, works: Lorain, Ohio | gal. | .34 | — |
| Middletown, Ohio | gal. | .34 | — |
| Mennequa, Colo. | gal. | .34 | — |
| Philadelphia district | gal. | .34 | — |
| Pittsburgh district | gal. | .34 | — |
| Port Arthur, Tex. | gal. | .34 | — |
| Benzene, pure or nitration, tanks, works: St. Louis, Mo. District | gal. | .34 | — |
| Sparrows Point, Md. | gal | .34 | — |
| Syracuse, N. Y. | gal. | .34 | — |
| Terre Haute, Ind. | gal. | .34 | — |
| Youngstown, Ohio | gal. | .34 | — |
| Lackawanna, N. Y. | gal. | .34 | — |
| Lone Star, Tex | gal. | .34 | — |
| Benzene hexachloride, 25% and 99% gamma isomer (see Lindane). | | | |
| Benzene hexachloride, tech., high gamma, bgs., c.l., t.l., consignment, dlvd. gamma-unit. | | .0075 | — |
| bgs., c.l., t.l., direct sale, f.o.b. works gamma-unit. | | .0065 | — |
| Tech., low gamma, bgs., c.l., t.l., consignment, dlvd gamma-unit. | | .0075 | — |
| bgs., c.l., t.l., direct sale, f.o.b. works gamma-unit. | | .0050 | — |
| Benzidine hydrochloride, bbls., c.l., frt. alld., 100% basis | lb. | 1.19 | — |
| bbls., t.c.l., same basis | lb. | 1.21 | — |
| Benzidine sulfate, tech., bbls., frt. alld., 100% basis | lb. | 1.21 | — |
| Benzidine yellow, AAA, bbls., dlvd. | lb. | 2.20 | — |
| AAOT, bbls., dlvd. | lb. | 2.55 | — |
| Lightfast, bbls., dlvd. | lb. | 3.40 | — |
| Benzocaine, dms., 100-lbs., frt. alld. | lb. | 3.25 | — |
| Benzoic acid, tech., dms., c.l., t.l., frt. alld | lb. | .25 | .37 |
| dms., t.c.l., same basis | lb. | .29 | .41 |
| tanks, same basis | lb. | .21 | — |
| USP, bbls., dms., ton lots | lb. | .48 | — |
| bbls., dms., 1,000-lb lots | lb. | .50 | — |

**BENZOL**
Benzol quotations, both coaltar and petroleum, may be found under Benzene.

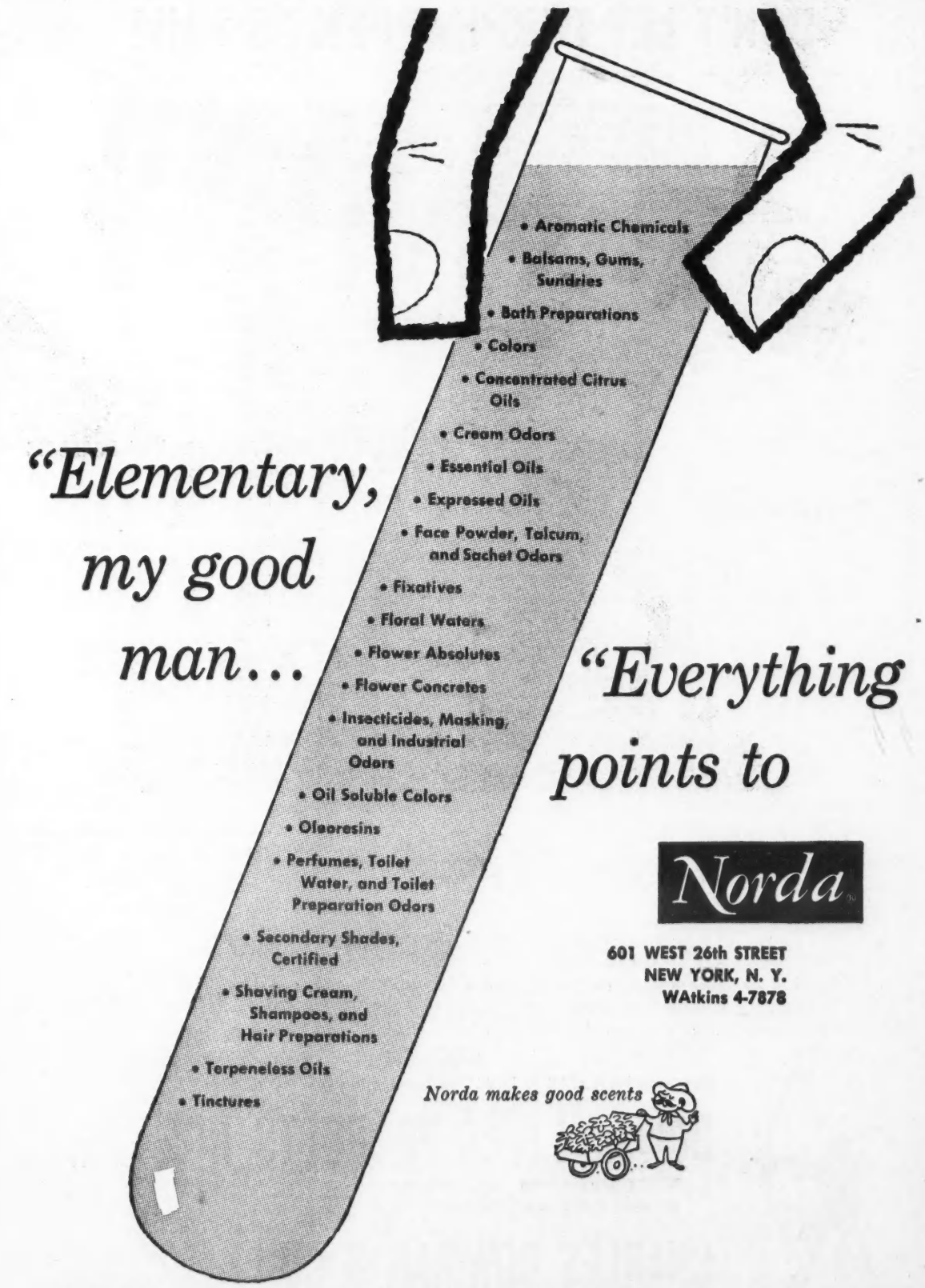
| | | | |
|---|---|---|---|
| Benzoin gum, Sumatra, cs. | lb. | .33 | — |
| Benzophenone, dms | lb. | 1.35 | 1.40 |
| Benzotriazole, tech. dms., 1,000-lb lots, works | lb. | 1.93 | — |
| Benzotrichloride, cbys., 1,000-lb lots or more, frt. equald. | lb. | .21 | — |
| cbys., smaller lots, frt. equald | lb. | .23 | — |
| Benzoyl chloride, cbys. dms., c.l., works, frt. equald | lb. | .22 | — |
| cbys., t.c.l., same basis | lb | .23 | — |
| tanktrucks, dlvd Metropolitan area | lb. | .21 | — |
| Benzoyl peroxide, purif., fib. dms., 30 to 1,000-lb lots, works | lb. | .98 | 1.08 |
| Benzyl acetate, f.f.o., cns., dms | lb. | .54 | — |
| Benzyl alcohol, NF, dms. | lb. | .54 | — |
| Tech., dms., dlvd. | lb | 47½ | .65 |
| Benzyl benzoate, USP, 40-lb. dms. | lb. | .62 | — |
| Benzyl chloride, tech., dms., c.l., f.o.b. frt. equald | lb. | .23 | — |
| dms., t.c.l., same basis | lb | .24 | — |
| tanktrucks, dlvd., Metropolitan area | lb. | .21 | — |
| Benzyl cinnamate, cns. | lb. | 3.80 | 4.00 |
| N-Benzyl-N,N-dimethylamine, 50 dms., frt. alld | lb. | 1.25 | — |
| 12-49 dms., same basis | lb. | 1.35 | — |
| 1-11 dms., same basis | lb. | 1.90 | — |
| Benzyl formate, cns. | lb. | 1.70 | 1.85 |
| Benzyl isoeugenol, cns. | lb. | 8.20 | 8.30 |
| Benzyl propionate, bots. | lb. | 1.30 | 1.35 |
| Benzyl salicylate, bots | lb. | 1.50 | 1.85 |
| Benzylidine acetone, bots | lb. | 1.65 | 1.75 |
| Benzylidine chloride (see Benzal chloride). | | | |
| Berberine bisulfate, cns | lb | 56.50 | — |
| Berberine hydrochloride, bots | lb. | 56.50 | — |
| Bergamot oil, nat., NF, Italian, cns. | lb. | 11.00 | 12.00 |
| Betagammapicoline (see b,g-Picoline). | | | |
| Betahydroxynaphthoic acid (see b-Oxynaphthoic acid). | | | |
| Betamethylnaphthalene (see Methylnaphthalene). | | | |
| Betanaphthol (see b-Naphthol). | | | |
| Betanaphthylamine (see b-Naphtholamine). | | | |
| Betaoxynaphthoic acid (see b-Oxynaphthoic acid). | | | |
| Betaphenylethylamine (see b-Phenylethylamine). | | | |
| BHC (see Benzene hexachloride tech.) | | | |
| Biotin, cryst., bots | gram. | 10.00 | — |
| Biphenyl (see Diphenyl). | | | |
| Birchtar oil, crude, cns. | lb | 1.50 | 1.90 |
| Rectified, cns. | lb | 1.75 | 2.00 |
| Bismuth chloride, jars | lb | 5.11 | — |
| Bismuth hydroxide dms | lb | 4.60 | 4.65 |
| Bismuth metal hxs. ton lots | lb. | 2.23 | — |
| Bismuth nitrate, cryst., 200-lb. dm. | lb. | 2.25 | — |
| Bismuth oxychloride, 25-lb. dm., f.o.b. works | lb. | 4.92 | — |
| Bismuth subcarbonate, USP, 25-lb. dm., f.o.b., works | lb. | 3.70 | — |
| Bismuth subgallate NF 200-lb dm. f.o.b works | lb | 3.98 | — |
| Bismuth subiodide fib dms | lb | 5.37 | — |
| Bismuth subnitrate NF, 200-lb dm., f.o.b., works | lb. | 3.10 | — |
| Bismuth subsalicylate USP, 100-lb. dm., f.o.b works | lb. | 4.15 | — |
| Bismuth trioxide 100-lb. dms., f.o.b works | lb. | 4.40 | — |
| Bismuth-ammonium citrate, USP, powd., jars | lb. | 4.22 | — |
| Bisphenol-A bgs., c.l., t.l., single shipt., 70,000-lbs or more, frt. alld | lb. | .30½ | — |
| bgs. c.l. t.l. less than 70,000 lbs., same basis | lb. | .31 | — |
| bgs., t.c.l., same basis | lb. | .32½ | — |
| Blackberry root bark, bls | lb | .50 | .55 |

**BLACK PIGMENTS**
Black pigment quotations are listed individually. For example, prices on Black, acetylene, may be found in the A's under Acetylene black.

| | | | |
|---|---|---|---|
| Blanc fixe, direct process, bgs. c.l., works | ton | 160.00 | — |
| bgs., t.c.l., works | ton | 170.00 | — |
| bgs., t.c.l., New York whse | ton | 215.00 | — |
| Blood dried 16-16½% ammonia, bgs., New York unit | ton | 5.50 | — |
| Bloodroot, bls. | lb | .85 | .90 |

**BLUE PIGMENTS**
Blue pigment quotations are listed individually. For example, prices on Blue, ultramarine, may be found in the U's under Ultramarine blue.

| | | | |
|---|---|---|---|
| Blue dyes (see Dyes) | | | |
| Blue vitriol (see Copper sulfate) | | | |
| Bois de rose oil, Brazilian, dms | lb | 2.05 | — |
| Peruvian dms. | lb | 1.65 | — |
| BON acid maroons pure, bbls | lb | 1.75 | — |
| Resinated bbls | lb | 1.50 | — |
| Bone black, dms., c.l., frt. alld | lb | .1750 | .2225 |
| t.c.l., works | lb | .1950 | .2425 |
| Pacific coast bone black prices 3¼c. per lb. higher | | | |
| Bonemeal, steamed, works, E | ton. | 100.00 | — |
| Bone phosphate defluorinated of lime (see Defluorinated phosphate). | | | |
| Bone phosphate, precip (see Calcium phosphate tribasic) | | | |
| Borax, tech. anhyd., 99½%, bgs., c.l., works | ton. | 92.00 | — |
| bgs. ton lots, ex whse, New York or Chicago | 100 lbs. | 7.67 | — |
| bgs., smaller lots same basis | 100lbs. | 8.91 | 10.91 |
| bulk, c.l., works | ton. | 83.00 | — |

Specialists in good products for the Drug, Chemical, and Cosmetic Industries

## Borax—Calcium Carbonate

| | | | |
|---|---|---|---|
| **Borax**, tech., gran., decahydrate, 99¼% bgs. c.l., works | ton | 50.00 | — |
| bgs. ton lots, ex whse, New York or Chicago | 100 lbs. | 5.31 | — |
| bgs. smaller lots same basis | 100 lbs. | 6.56 | 8.56 |
| bulk c.l., works | ton | 43.50 | — |
| pentahydrate 99½%, bgs., c.l., works | ton | 64.50 | — |
| bgs. ton lots, ex whse, New York or Chicago | 100 lbs. | 6.13 | — |
| bgs. smaller lots same basis | 100 lbs. | 7.37 | 9.37 |
| bulk, c.l., works | ton | 58.00 | — |
| USP powd. bgs c.l., works | ton | 54.00 | — |
| bgs. ton lots ex whse. New York or Chicago | 100 lbs. | 6.57 | — |
| bgs. smaller lots. same basis | 100 lbs. | 7.82 | 9.82 |
| **Bordeaux powder** tribasic bgs. c.l., dlvd | lb. | .24 | — |
| bgs. t.c.l., same basis | lb. | .26 | — |
| **Boric acid** tech. anhyd 99.9% bgs., c.l., works | ton | 335.00 | — |
| bgs. ton lots. ex whse. New York or Chicago | 100 lbs. | 21.27 | — |
| bgs. smaller lots. same basis | 100 lbs. | 22.52 | 24.52 |
| cryst. 99.9% bgs. c.l. works | ton | 163.50 | — |
| bgs. ton lots. ex whse. New York or Chicago | 100 lbs. | 11.67 | — |
| bgs. smaller lots. same basis | 100 lbs. | 12.92 | 14.92 |

| | | | |
|---|---|---|---|
| **Boric acid**, tech., cryst., 99.9%, dms., c.l., works | ton. | 188.50 | — |
| dms., ton lots, ex whse., New York or Chicago | 100 lbs. | 13.17 | — |
| dms., smaller lots, same basis | 100 lbs. | 14.42 | — |
| gran., 99.9%, bgs., c.l., works | ton. | 112.00 | — |
| bgs., ton lots, ex whse. New York or Chicago | 100 lbs. | 8.78 | — |
| bgs. smaller lots. same basis | 100 lbs. | 10.03 | 12.03 |
| dms. c.l. works | ton. | 137.00 | — |
| dms, ton lots, ex whse, New York or Chicago | 100 lbs. | 10.29 | — |
| dms. smaller lots. same basis | 100 lbs. | 11.54 | — |
| bulk, c.l., works | ton. | 106.00 | — |
| powd., bgs., ton lots, ex whse., New York or Chicago | 100 lbs. | 9.20 | — |
| bgs., smaller lots. same basis | 100 lbs. | 10.45 | 12.45 |
| dms., ton lots, ex whse., New York or Chicago | 100 lbs. | 10.71 | — |
| dms., smaller lots, same basis | 100 lbs. | 11.96 | — |
| USP boric acid $25 per ton higher in bags. | | | |
| **Borneol**, cns. | lb. | 2.75 | — |
| **Boron trichloride** CP, 1,800-lb. cyls., works | lb | 1.25 | — |
| 100-lb. cyls. works | lb | 1.70 | — |
| **Boron trifluoride**, gas, cyls., t.l., works | lb. | .70 | — |
| cyls., t.t.l., works | lb. | .70 | — |

| | | | |
|---|---|---|---|
| **Brimstone** (see Sulfur). | | | |
| **Broenner's acid**, bbls. | lb. | 1.80 | — |
| **Bromine**, purif., cs., c.l., t.l., dlvd. E. of Rockies | lb. | .32 | — |
| cs., t.c.l., same basis | lb. | .34 | .39 |
| **Bromine**, purif., ret. dms., c.l., t.l., dlvd. E. of Rockies | lb. | .31 | — |
| ret. dms., t.c.l., same basis | lb. | .33 | .34 |
| tanks, same basis | lb. | .21½ | — |
| **Bromochloromethane**, dms., c.l., frt. equald | lb. | .48 | — |
| dms., t.c.l., same basis | lb. | .50 | — |
| tanks, same basis | lb. | .47 | — |
| **Bromoform**, pharmaceutical grade, 5-gal. cby., frt. equald | lb. | 1.95 | — |
| **Bromstyrol**, bots | lb. | 5.25 | 5.35 |
| **Brucine** cns | oz. | Nominal. | |
| **Brucine sulfate**, NF, cns | oz. | 1.45 | 1.75 |
| **Buchu leaves**, bbls. | lb. | .50 | .55 |

### BROWN PIGMENTS

Brown pigment quotations are listed individually For example, prices on Brown, Iron oxide, may be found in the I's under Iron oxide brown.

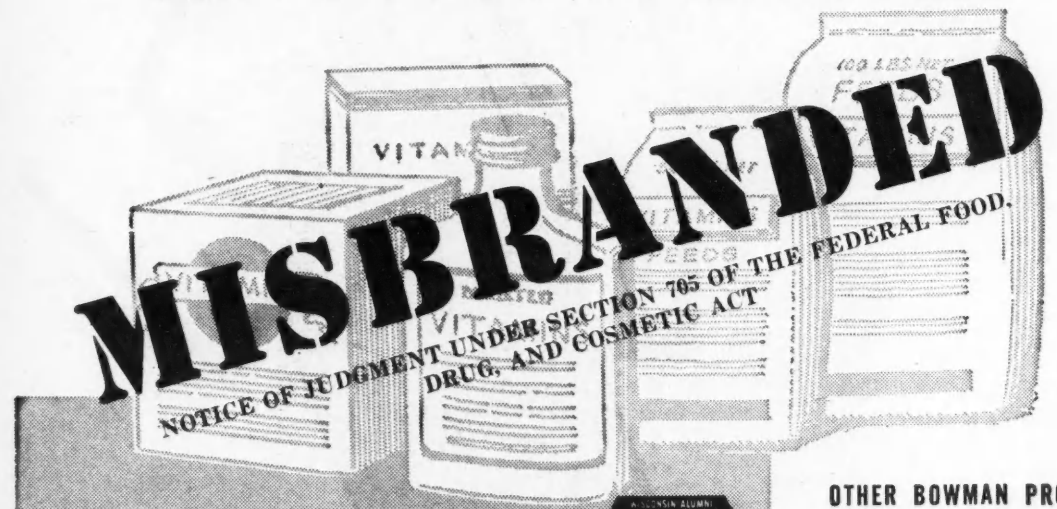
| | | | |
|---|---|---|---|
| **Butadiene**, refd cyls. c.l., refy | lb. | .21 | — |
| cyls., t.c.l., refy | lb. | .22 | — |
| tanks, dlvd | lb. | .12¾ | — |
| **Butene-1** tanks works | lb. | .0625 | — |
| **Butene-2**, tanks works | lb. | .0570 | — |
| **n-Butyl acetate** ferment, dms., c.l., frt. alld | lb. | .17 | — |
| dms., t.c.l., same basis | lb. | .18½ | — |
| tanks, same basis | lb. | .14½ | — |
| Syn. dms. c.l., dlvd. E | lb. | .17 | — |
| dms., t.c.l., same basis | lb. | .18½ | — |
| tanks, same basis | lb. | .14½ | — |
| **sec-Butyl acetate** syn. dms., c.l., dlvd. E. | lb. | .14¾ | — |
| dms., t.c.l., same basis | lb. | .16¼ | — |
| tanks, same basis | lb. | .12¼ | — |

| | | | |
|---|---|---|---|
| **n-Butyl acrylate**, dms., c.l. or t.l., straight or mixed frt. alld. E. | lb. | .27½ | — |
| dms., t.t.l., same basis | lb. | .28½ | — |
| tanks, same basis | lb. | .25 | — |
| **n-Butyl alcohol**, ferment, dms., c.l., frt. alld | lb. | .18 | — |
| dms., t.c.l. frt. alld | lb. | .19½ | — |
| tanks, frt. alld. | lb. | .15½ | — |
| **Sec-synthetic**, dms., c.l., dlvd | lb. | .15 | — |
| dms., t.c.l., dlvd. | lb. | .16½ | — |
| tanks, dlvd. | lb. | .13½ | — |
| **Tert-synthetic**, dms., c.l., frt. alld., dlvd. E | lb. | .16 | — |
| dms., t.c.l., same basis | lb. | .17½ | — |
| tanks, same basis | lb. | .13½ | — |
| **Butyl aldehyde** (see Butyraldehyde). | | | |
| **Butyl chloride**, dms., c.l., works | lb. | .37½ | — |
| dms., t.c.l., works | lb. | .38¼ | — |
| **n-Butyl ether** dms., c.l., works | lb. | .35¼ | — |
| dms., t.c.l., works | lb. | .36 | — |
| tanks, works | lb. | .33¼ | — |
| **Butyl lactate**, dms. c.l. frt. alld. E. Rockies | lb. | .42½ | — |
| dms., t.c.l., same basis | lb. | .43½ | — |
| tanks, same basis | lb. | .40 | — |
| **Butyl laurate**, dms., works | lb. | .37½ | — |
| **Butyl methacrylate**, dms., c.l., t.l., works | lb. | .55 | — |
| dms. t.c.l., works | lb. | .55½ | — |
| **Butyl oleate**, refd., dms., t.c.l., works | lb | .32 | — |
| **Butyl phenylacetate**, dms. | lb | 4.50 | 4.60 |
| **Butyl phthalate** (see Dibutyl phthalate) | | | |
| **Butyl stearate** dms c.l. frt alld E. of Rockies | lb. | .27¼ | — |
| dms., t.c.l., same basis | lb. | .28¼ | — |
| **Butylamine** (see Mono- Di- and Tri-butylamine). | | | |
| **tert-Butylamine** dms. c.l., t.l., f.o.b. works | lb. | .47 | — |
| dms., t.c.l., same basis | lb. | .47½ | — |
| tc., t.t., same basis | lb. | .45 | — |
| **Butylated** hydroxyanisole, food grade, dms. dlvd. | lb | 4.75 | — |
| **6-tert-Butyl m cresol** (see Mono-tert-butyl-m cresol) | | | |
| **Butylated** hydroxytoluene (see 2,6-Di-tert-butyl-p-cresol) | | | |
| **1,3 Butylene glycol** dms. c.l., t.l., dlvd | lb. | .20¼ | — |
| dms., t.c.l., t.t.l., f.o.b. works | lb. | .22 | — |
| tanks, dlvd | lb | .18 | — |
| **p-tert-Butylphenol**, bgs., c.l., frt. alld | lb. | .25½ | — |
| bgs., t.c.l., same basis | lb. | .26½ | — |
| tanks, same basis | lb. | .23½ | — |
| **Butyraldehyde**, dms., c.l., dlvd | lb. | .22 | — |
| dms., t.c.l., dlvd | lb. | .23½ | — |
| tanks, dlvd | lb. | .19½ | — |
| **Butyric acid**, 99%, dms., c.l., frt. equald | lb. | .34 | — |
| dms., t.c.l., same basis | lb. | .34½ | — |
| tanks, same basis | lb. | .32½ | — |
| **Butyric ether** (see Ethyl butyrate) | | | |
| **Butyrolactone** dms. c.l. t.l. works. | lb. | .40 | — |
| dms. t.c.l. same basis | lb | .42 | — |
| **n-Butyronitrile**, dms., c.l., dlvd | lb. | .56½ | — |
| dms., t.c.l., dlvd. | lb. | .57½ | — |
| tanks, dlvd. | lb. | .54 | — |

## C

| | | | |
|---|---|---|---|
| **Cacao butter** (see Cocoa butter). | | | |
| **Cadmium** CP red dark shade, bbls., frt alld E of Rockies | lb | 5.55 | — |
| Light shade bbls same basis | lb | 4.65 | — |
| Medium shade, bbls., same basis. | lb. | 5.30 | — |
| Medium light shade, bbls., same basis | lb | 4.90 | — |
| Orange-red shade, bbls., same basis | lb | 4.30 | — |
| Yellow, all shades, bbls, frt alld E. of Rockies | lb | 2.95 | — |
| **Cadmium** chloride, 400-lb dms., f.o.b shipping point | lb. | 1.49 | — |
| **Cadmium** iodide, 25-lb fib dms | lb | 6.75 | 7.00 |
| **Cadmium** metal, ingots or sticks, ton lots, cs., dlvd | lb. | 1.60 | — |
| **Cadmium** nitrate, purif cryst. tc., lb. dms., less than 5,000 lbs., f.o.b shipping point, | lb. | .89 | — |
| 400-lb. dms., 5,000 lbs. or more, same basis | lb. | .87 | — |
| **Cadmium-mercury** lithopone orange, deep shade bbls. frt alld E of Rockies | lb. | 1.70 | — |
| **Cadmium-mercury** lithopone red, dark shade, bbls same basis | lb. | 2.00 | — |
| Red, light shade bbls., same basis | lb. | 1.77 | — |
| Red, medium shade, bbls, same basis | lb. | 1.92 | — |
| Red, medium light shade bbls, same basis | lb. | 1.85 | — |
| Red, maroon shade bbls same basis | lb. | 2.08 | — |
| **Cadmium-selenide** lithopone maroon, bbls., frt alld E of Rockies | lb. | 2.81 | — |
| Orange, bbls., same basis | lb. | 1.63 | — |
| **Cadmium-selenide** lithopone red, orange-red shade bbls. same basis | lb. | 1.77 | — |
| Red, dark shade, bbls same basis | lb. | 2.61 | — |
| Red, light shade, bbls., same basis | lb. | 1.63 | — |
| Red, medium shade, bbls, same basis | lb. | 2.28 | — |
| Red, medium-light shade bbls same basis | lb. | 2.05 | — |
| **Cadmium-selenide**, lithopone, yellow, all shades bbls frt alld E. of Rockies | lb. | 1.24 | — |
| **Caffeine** NF citrated dms 100 lb lots or more | lb | 2.70 | — |
| USP, syn., cryst., hydrous, dms., 100-lb. lots or more, frt. alld | lb. | 2.25 | — |
| hydrous, powd., 150-lb. dms., frt. alld | lb. | 2.25 | — |
| USP, syn., cryst., anhyd., powd., dms., 100-lb. lots or more, frt. alld | lb. | 2.40 | — |
| **Cajuput oil**, native cns | lb | 1.75 | 2.00 |
| Redist. USP cns | lb | 1.90 | 2.10 |
| **Calamine** USP dms | lb | .34 | — |
| **Calamus oil** bots | lb | 12.00 | 30.00 |
| **Calciferol**, cryst., 10-kilo or more lots, works | gram | .54 | — |
| 1-10 kilo lots | gram | .55 | — |
| **Calciferol** in edible oil (see Vitesterol) | | | |
| **Calcium** p-aminosalicylate trihydrate fib dms 100 lbs or more frt adjusted | lb | 3.10 | — |
| **Calcium** bromide NF tars 100 lbs. or more | lb. | 1.10 | — |
| **Calcium carbide** standard generator size, 600-lb dms. c.l., dlvd | ton. | 149.00 | — |
| **Calcium carbonate**, nat., dry grd. air floated, 325 mesh, bgs. c.l. works | ton. | 10.50 | — |
| Chalk, whiting, 325 mesh, bgs., c.l., works | ton. | 32.00 | 34.00 |
| water-grd. ½ to 10 microns bgs., c.l. works | ton. | 30.00 | — |
| 10 to 20 microns bgs. c.l. works | ton | 17.00 | 18.00 |
| Precip., dense, bgs., c.l., works. | ton. | 30.00 | 38.50 |
| bgs. t.c.l., works | ton | 45.00 | 53.50 |
| medium bgs c.l., works | ton | 38.00 | — |
| bgs., t.c.l., works | ton | 48.00 | 53.00 |


# DON'T LET THIS HAPPEN TO YOU!

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Brewers' (Saccharomyces cerevisiae)

PURE VEGETABLE EXTRACT COLORS

Yellow—Red Orange

ENZYMES

T.S. 3 for Greasetrap and Septic Tanks

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Phytol
Carotene
Xanthophyll
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Hydropoid

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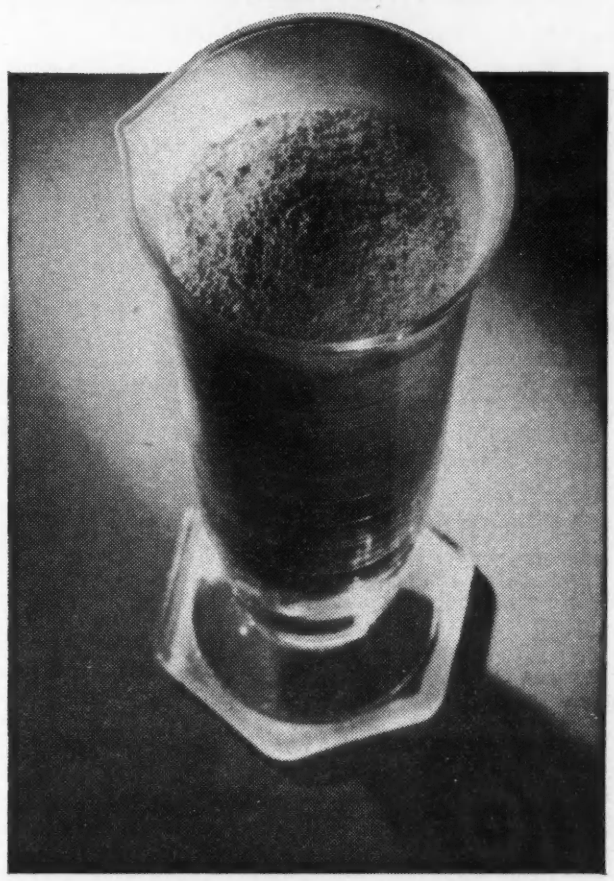
Calcium carbonate, surface treated, bgs., c.l., works ton 42.00 - 44.00
bgs., l.c.l., works ton 57.00 - 59.00
ultrafine, bgs., c.l., works ton 117.50 - 167.50
bgs., l.c.l., works ton 137.50 - 187.50
Calcium chloride, conc., flake or pellet 94-97%, paper bgs., c.l., works, frt. equald. ton 39.30 - —
Flake, 77-80%, paper bgs., c.l., works, frt. equald ton 32.00 - —
Liquor, 40%, tanks, frt. equald. ton 12.50 - —
Powd., 77% min., paper bgs., c.l., works, frt. equald ton 37.00 - —
Purif., gran. dms lb. .27 —
Calcium chloride, solid, 73-75%, dms., c.l., frt. equald ton 30.50 - —
dms., l.c.l. works, frt. equald. ton 36.00 - 73.00
USP, gran., dms. lb. .32 - —
Calcium chromate, bgs., dlvd lb. .37 - —
Calcium cyclamate, 100-lb. dms lb. 1.95 - —
Calcium gluconate, USP, AA grade, 100-lb. dm., ton lb. .73½- —
USP, powd. 100-lb dm., ton lb. .66½- —
Calcium hydride lump, dms. works. lb. 2.20 3.00
Calcium hypochlorite, high test, gran. 45-lb. cs., dlvd E. of Rockies cs. 27.50 - —
100-lb. dms., same basis dm. 39.50 - —
Calcium hypophosphite, dms. 1,000-lb. lots lb. 1.28 - —
Calcium iodide, 25-lb. jars, works. lb. 4.27 - —
Calcium lactate NF, dms., f.o.b. works lb. .43 - .46
Calcium mandelate, USP, 150-lb. dm., works lb. 3.25 - —
Calcium naphthenate, liq., 4% Ca., dms., frt equald lb. .30 - —
Calcium pantothenate, USP, jars, 1 kilo or more kilo. 35.00 - —
Calcium para-aminosalicylate (see Calcium p-aminosalicylate).
Calcium phenosulfonate, dms lb. 1.24 - 1.25
Calcium phosphate, dibasic, USP, dihydrate, bgs., c.l., frt. equald 100 lbs. 8.25 - —
Dibasic, feed grade, 18½% P, bgs., c.l., t.l., Bonnie, Fla., frt. equald ton 81.00 - —
bgs. c.l. t.l., f.o.b. Texas City works ton 75.50 - —
bgs., l.c.l., ton 96.00 - —
Feed grade, 21% P., bgs., c.l., t.l., frt. equald ton 97.65 - —
bgs., l.c.l. frt equald ton 107.65 - —
Prices of calcium phosphate dibasic in bulk $3 per ton less than bgs., c.l. prices.
Calcium phosphate, monobasic, bgs., 10,000-lb lots, frt. equald. 100 lbs. 7.45 - —
bgs., smaller lots, same basis. 100 lbs. 7.93 - —
Tribasic, NF, precip., bgs., c.l., works, frt. equald 100 lbs. 9.25 - —
bgs. l.c.l., frt. equald. 100 lbs. 10.00 - —
Calcium propionate, any quantity, dms., dlvd E. of Rockies. lb. .37 - —
Prices W of Rockies 3c. per lb. more.
Calcium phytate, bgs., 50 lbs. or more f.o.b. warehouse N. Y. lb. .39 - —
Calcium resinate, precip., dms., frt. alld., works lb. .45 - —
Calcium silicate, hydrated, bgs., c.l., works lb. .06 - —
bgs., l.c.l., works lb. .06½- —
Calcium silicate paint grade (see Wollastonite).
Calcium stearate, ctns., c.l. lb. .39 - —
ctns., l.c.l. lb. .40 - .44
Calomel, NF mild, powd., dms., 100-lbs., f.o.b. works lb. 4.32 - —
NF mild, precip., dms., 100-lbs., f.o.b. works lb. 5.67 - —
Camphene, 46° m.p., dms incl., c.l., works lb. .15 - —
dms. incl., l.c.l., same basis lb. .16½- —
tanks, same basis lb. .12½- —
Camphene, chlorinated, 67-69% (see Toxaphene)
Camphor, monobromated, NF, dms., kgs lb. 3.63 - 3.70
Camphor, syn., tech., 1 bbl. or more. lb. .45 - —
USP, gran., powd., bbls., 1,000-lb. lots lb. .53 - —
bbls, smaller lots lb. .54 - —
tablets, ctns., 1,000-lb. lots. lb. .80 - —
ctns., 500-lb. lots lb. .81 - —
ctns., smaller lots lb. .82 - —
Camphor oil, sassafrassy, dms. lb. .35 - .55
White, dms. lb. .26 - .50
Cananga oil, native, cns. lb. 5.00 - 6.50
Rectified, cns. lb. 7.25 - 10.00
Candelilla wax, crude, bgs. lb. .57 - .58
Refd., pure, bgs lb. .62 - .63
Powdered Candelilla wax 20 to 100 mesh, 8c. higher.
Cantharides, Chinese, cs. lb. 1.00 - —
powd., bgs. lb. 1.15 - —
Russian, bgs. lb. 2.00 - 2.15
powd., bgs. lb. 2.15 - 2.30
Capric acid, dms lb. .27¼- .29¾
tanks lb. .24¾- —
Caprolactam, monomer, bgs., c.l., t.l., f.o.b. works lb. .52 - —
bgs., l.c.l., l.t.l., same basis lb. .57 - —
tanks, same basis lb. .49 - —
Caprylic alcohol, 65% dms., c.l., t.l., works lb. .19 - —
dms., l.t.l., same basis lb. .19½- —
tanks, frt. equald. lb. .16½- —
Sec. 92-99% dms., c.l., f.o.b. works lb. .22 - —
dms. l.c.l., f.o.b. works lb. .23 - —
tanks, f.o.b. works lb. .19½- —
Caprylic acid, dms lb. .27¼- .29¾
tanks lb. .24¾- —
Capsicum (see Pepper red).
Capsicum oil (see Capsicum oleoresin).
Capsicum oleoresin, NF, from dom. pepper, dms lb. 4.00 - —
NF, from African pepper, dms. lb. 4.50 - —
Caraway oil, NF, dms lb. 3.75 - —
Caraway seed, Danish, bgs. lb. .16 - —
Dutch, bgs. lb. .19 - —
Carbazole, 97%, bbls. ton lots, works lb 1.05 —
Carbon black, channel, rubber beads, bulk, c.l., works lb. .08 - —
bgs., c.l., works lb. .08½- —
bgs., l.c.l., works lb. .16¼- —
furnace, fast extruding, bgs., c.l., works lb. .08¾- —
ctns, l.c.l., whse lb. .13½- —
high abrasion, bulk, c.l., works. lb. .07¼- —
bgs., c.l., works lb. .07¾- —
bgs., l.c.l., dlvd. or whse lb. .14½- —
high modulus, bgs., c.l., works lb. .08¼- —
ctns., l.c.l., whse lb. .13 - —
semi-reinforcing, bgs., c.l., works. lb. .05¾- —
bgs., ctns., l.c.l., whse lb. .12½- —
pigment, high color beads, ctns., c.l., works lb. .76 - —
ctns., l.c.l., dlvd. or whse lb. .87 - —
medium color, uncompressed, bgs., c.l., works lb. .14 - —
bgs., l.c.l., dlvd. or whse lb. .22½- —

Carbon dioxide, indust., wholesale, bulk, 30,000-2,999,999 lbs., dlvd. Metropolitan areas, E ton 60.00 - 115.00
bulk, 3,000,000 lbs. or more, dlvd. Metropolitan areas, E ton 55.00 - —
Solid, bulk, wholesale, works ton 85.00 - —
Carbon disulfide, 55-gal. dms., c.l., works, frt. equald to competitive points lb. .071 - —
55-gal. dms., l.c.l., same basis lb. .086 - .091
5-gal. dms., 30 dms. to c.l., same basis lb. .131 - —
5-gal. dms., less than 30 dms., same basis lb. .161 - —
tanks, f.o.b. works lb. .0450- —
Carbon tetrachloride, CP, consumers, dms., c.l., frt alld. lb. .12¾- —
dms., l.c.l., frt. alld. lb. .15¼- —
Tech., consumers dms., c.l., t.l., frt. alld lb. .11¾- —
dms., l.c.l., l.t.l. frt. alld lb. .14¼- —
tanks, frt alld lb. .10¾- .11¼
Carboxymethyl cellulose (see CMC).
Carbromal, NF dms. 100-lb lots, works lb. 4.00 - 4.25
dms. smaller lots, works lb 4.10 - 4.75
Cardamom oil, NF, bots lb. 41.00 - 43.00
Cardamom seed, bleached "A" lb. 3.45 - —
Bleached "B" lb. 3 15 - —
Decorticated Alleppey, cs. lb. 2.70 - —
Guatemala, cs. lb. 2.10 - —
Green, Alleppey, bgs lb. 2.10 - —
Ceylon, bgs. lb. 2.10 - —
Carmine No. 40, NF, bulk, 100-lb. lots or more, dlvd. lb. 16.80 - —
bulk, smaller lots, dlvd. lb. 16.90 - 17.30
Carnauba wax, chalky, bgs., ton lots. lb. .65 Nom.
North Country, No. 2, crude, bgs., ton lots lb. .73 Nom.
refd., pure, ton lots lb. .80 - .82

Carnauba wax, North Country, No. 3, Ceara, crude, ton lots. lb. .60 - .62
North Country, No. 3, Parnahyba, crude, ton lots lb. .62 - .64
No. 3, refd., pure, bgs., ton lots. lb. .69 - .70
No. 1, Ceara, yellow, bgs., ton lots. lb. .87 - .89
Parnahyba, yellow, bgs., ton lots. lb. .89 - .91
Powdered carnauba wax, 20 to 100 mesh 8c. per lb. higher.
Carotene, tech., 1,350,000 A units per gram tins, 5-10 kilo lots, dlvd gram. .20½- —
in carrot oil, 5,000,000 to 8,000,000 A units per lb., dms., works million units. .12 - —
USP, microcrystalline in oil, 400,000 A units per gram., dms., dlvd million units. .144 - —
b-Carotene, in vegetable oil, semi-solid suspension 400,000 A units per gram cns kilo. 57.60 - —
b-Carotene, liquid in vegetable oil, 500,000 A units per gram, cns kilo. 72.00 - —
Pure, cryst., 1,600,000 to 1,670,000 A units per gram, cns. kilo. 240.00 - —
Carvol, bots. lb. 5.00 - 5.40
Cascara sagrada bark, bulk lb. .32 - —
Casein, dom., edible, acid precip., 30 mesh., bgs., 10,000-lb. lots or more, works lb. .56 - —

Casein, dom., edible, acid, precip., 80 mesh, bgs., 10,000-lb. lots or more, works lb. .64 - —
imp., inedible acid-precip., gro., Argentine, bgs., c.l., ex-dock Eastern seaports lb. .16¾ - .17¼
Australian, bgs. c.l., same basis lb. .19¼ - 19¾
New Zealand, same basis lb. .24 - .25
Cashewnut shell, liquid, treated, dms., c.l., Newark, N.J lb 24 —
dms. ton lots, same basis lb 25 —
t.w., same basis lb 22½ —
Cassella acid, dms. frt alld., 100% basis lb 1.44 - 1.75
Cassia oil, redist., USP cns lb 7.50 - 9.00
Cassia, Padang, "A," bls. lb. .31 —
"B," bls. lb. .30 —
"C," bls. lb. .29 —
Korintje "A," bls. lb. .31 - —
"B," bls. lb. .29 - —
"C," bls. lb. .27 - —
Castor oil, dom., blown, dms., c.l. lb. .2550 —
dms. l.c.l lb 2650 —
dehydrated, bodied, dms., c.l. lb. .2700- —
dms., l.c.l. lb. .2850 —
tanks lb. .2500 —
dehydrated, unbodied, dms., c.l. lb. .2500- —
dms., l.c.l. lb. .2660- —
tanks lb. .2360- —
hydrogenated, bgs., c.l. lb. .2475- —
bgs., ton lots lb. .2875- —
bgs., l.c.l., dlvd lb. .3075- —


# Predictable enterics start here



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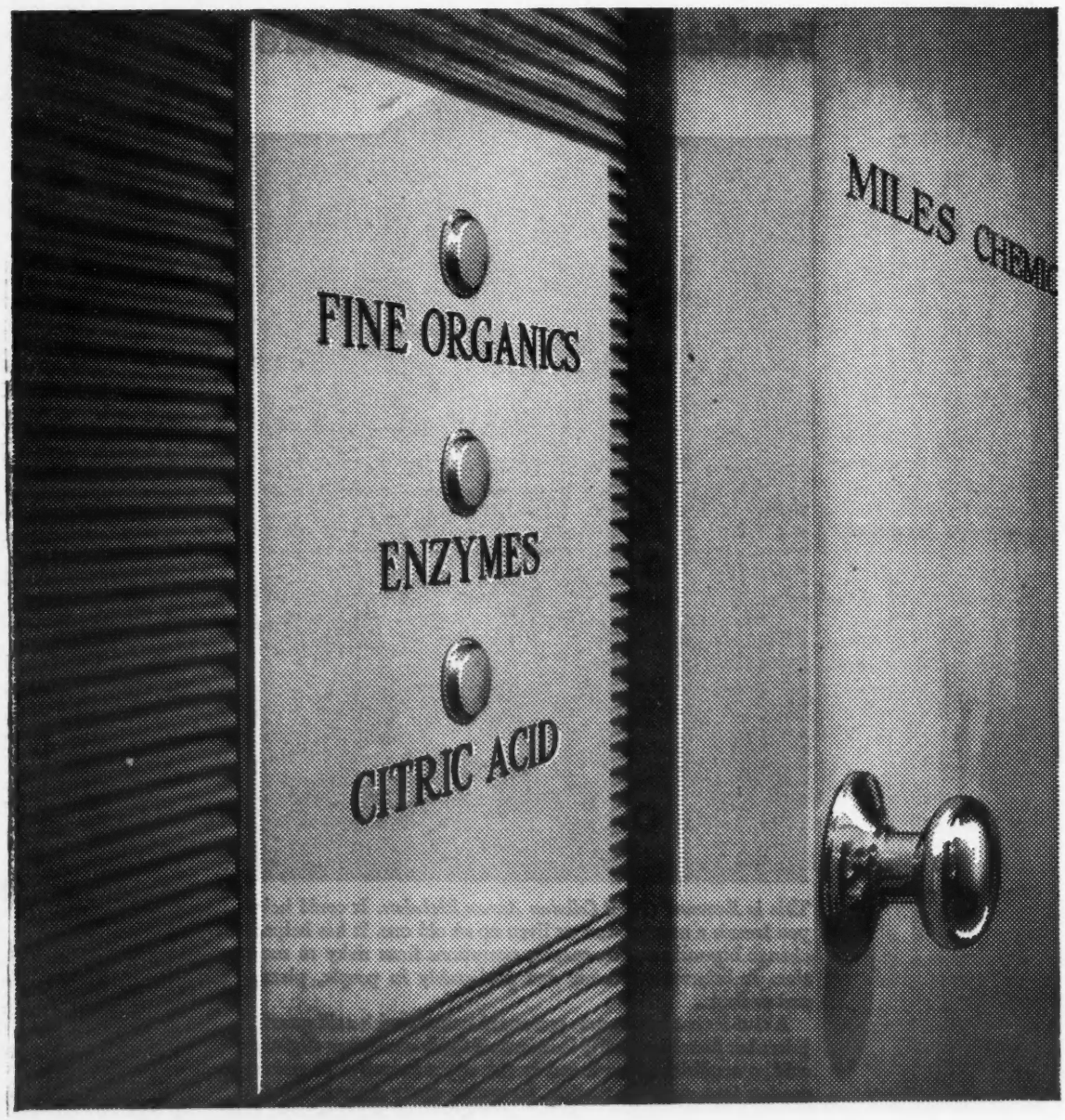
## Castor Oil—Citric Acid

| | | | |
|---|---|---|---|
| Castor oil, dom., raw, No. 1, dms., c.l. | lb. | .2200 | — |
| dms., t.c.l. | lb | 2300 | — |
| tanks | lb | 2000 | — |
| No. 3, tech., dms., c.l. | lb. | .2125 | — |
| dms. c.l., | lb | 2225 | — |
| tanks | lb | 1925 | — |
| Refd. deod dms., c.l. | lb | 2650 | — |
| dms., t.c.l. | lb | 2750 | — |
| tanks | lb | 2450 | — |
| USP, dms., c.l. | lb | 2350 | — |
| dms., t.c.l | lb | 2450 | — |
| tanks | lb | 2150 | — |
| Imported, No. 1, Braz., tanks | lb. | .17¼ | — |
| No. 3, tanks, same basis | lb. | .16¾ | — |
| Sulfonated, 50%, dms., works | lb | .15 | .15½ |
| 75% dms works | lb | 19 | .19¼ |
| Castor oil acids, dehydrated, dms. | lb. | .41¼ | .43¼ |
| Split, dms. | lb. | .33¾ | .34¾ |
| Castor pomace, bgs., c.l., works | ton. | 35.00 | — |
| Castereum nat., cns. | lb | 5.25 | — |
| Syn., cns. | lb | 9.00 | — |
| Catechol, CP, cryst., fib., dms., works | lb | 2.17½ | — |
| Resub., dms., works | lb | 4.29½ | — |
| Catnip leaves, Southern, bls | lb. | Nominal. | |
| Caustic potash (see Potash caustic). | | | |
| Caustic soda (see Soda, caustic) | | | |
| Cedarleaf oil USP XIII cns., dms. | lb. | 4.00 | 5.00 |
| Cedarwood oil cns., dms. | lb. | 1.00 | — |
| Celery seed, French, bgs | lb. | .36 | — |
| Indian, bgs. | lb. | .21 | — |
| Cellulose acetate, flake, powd., bgs., t.l., dlvd E | lb. | .38 | .51 |
| Cellulose acetate-butyrate, powd., 17% butyryl content, bgs., dlvd E | lb. | .545 | .555 |
| 27% butyryl content, bgs. dlvd. E | lb. | .595 | .605 |
| 38% butyryl content, bgs., dlvd. E | lb. | .545 | .555 |
| 38% butyryl content, half-second, bgs., dlvd. E | lb. | .545 | .555 |
| 50% butyryl content, bgs. dlvd. E | lb. | .585 | .595 |
| Cellulose gum, methyl (see Methyl Cellulose) | | | |
| Cellulose gum, pure, high vis., bgs., 23,000-lb lots or more works, frt alld | lb. | .57 | — |
| bgs., smaller lots, same basis | lb. | .59 | — |
| standard, low or medium vis., bgs., c.l., t.l., frt. alld, E | lb. | .57 | — |
| standard, low or medium vis., bgs., ton, frt. alld. E | lb. | .59 | — |
| (Cellulose gum prices 1c. per lb. higher in west.) | | | |
| Cerium hydrate 74% CeO, fib. dms., 100-lb lots or more | lb. | 1.40 | — |
| 77% CeO, fib dms., 100-lb. lots or more | lb. | 1.74 | — |
| Cerium oxalate (see Rare earth oxalate) | | | |
| Cerium oxide, optical grade, bgs., 50-lb lots or more, dlvd. | lb | 1.85 | 1.90 |
| bgs., smaller lots, dlvd. | lb. | 2.15 | — |
| Cetyl alcohol NF, fib cns., c.l., t.l., dlvd. E | lb. | .41¼ | — |
| fib. cns., t.c.l., same basis | lb. | .43½ | — |
| tanks, same basis | lb. | .39 | — |
| Extra, cns., c.l., t.l., dlvd. E | lb. | .48¼ | — |
| fib. cns., t.c.l., same basis | lb. | .50½ | — |
| tanks, same basis | lb. | .46 | — |
| Chalk (see Calcium carbonate). | | | |
| Chamomile flowers, Hungarian, | lb. | 1.00 | 1.25 |
| Roman, cs. | lb. | 1.50 | 1.75 |
| Chamomile oil, blue Hungarian, bots | lb. | 350.00 | — |
| Charcoal, activated NF, fib dms., c.l., works | lb. | .34 | — |
| fib. dms., 5-ton lots, works | lb. | .35 | .35½ |
| fib dms., smaller lots, works | lb. | .38 | .59 |
| Charcoal, black (see Charcoal, activated) | | | |
| Charcoal, bone (see Bone black). | | | |
| Charcoal, hardwood, lump, bulk, c.l., f.o.b plant | ton. | 55.00 | — |
| briquets, bulk, c.l., f.o.b. plant | ton. | 80.00 | — |
| 5-lb. paper bgs., c.l., same basis | ton. | 106.00 | — |
| 20-lb. paper bgs., c.l., f.o.b. plant, | ton. | 90.00 | — |
| 40-lb. paper bgs. c.l., same basis | ton. | 88.00 | — |
| Chenopodium oil, NF, cns | lb. | 4.75 | 5.00 |
| Chicago acid, paste, bbls., frt. alld. | lb. | 3.21 | — |
| Chinawood oil (see Tung oil). | | | |
| Chloral, tech., 94% min., dms., c.l., works | lb. | .23 | — |
| dms., t.c.l., works | lb. | .24 | — |
| tanks, multiple units, 5 cars, | lb. | .21 | — |
| dms., t.c.l., works | lb. | .22 | — |
| Chloral hydrate, USP, jars, 1,000-lb. lots | lb. | 1.00 | — |
| jars, 500-lb lots | lb. | 1.03 | — |
| jars, 100-lb. lots or less | lb. | 1.05 | — |
| Chlordan, agricultural, dms., c.l., frt. alld | lb. | .68 | — |
| dms., t.c.l., 5,000-10,000-lb. lots, frt. alld | lb. | .66 | — |
| clarified, dms., c.l., frt. alld | lb. | .69 | — |
| dms. t.c.l., 5,000-10,000-lb. lots, frt. alld | lb. | .70 | — |
| Chlorinated paraffin, 40%, dms., c.l., frt. alld | lb. | .15 | — |
| dms., t.c.l., 10 dms. or more, same basis | lb. | .16 | — |
| 70%, dms., c.l., same basis | lb. | .18½ | — |
| dms., t.c.l., 10 dms. or more, same basis | lb. | .19½ | — |
| Chlorinated rubber, 5, 10, 20 cps., ctns., c.l., works | lb. | .60 | — |
| ctns., t.c.l., works | lb. | .61 | — |
| 125 cps. ctns., c.l., works | lb. | .70 | — |
| 300 cps., ctns., c.l., works | lb. | .80 | — |
| Chlorine, liq., cyls., c.l., works, frt. equald | lb. | .11 | — |
| cyls., t.c.l., Metropolitan area | lb. | .12½ | .13¾ |
| tanks, single units, works, frt. equald 100 lbs. | | 3.25 | — |
| tanks, multiple units, 5 cars, works, frt. equald 100 lbs. | | 4.15 | — |
| tanks, multiple units, 4 cars, same basis 100 lbs. | | 4.35 | — |
| tanks, multiple units, 2 cars, same basis 100 lbs. | | 5.33 | 5.83 |
| tanks, multiple units, 1 car, same basis 100 lbs. | | 6.25 | 7.35 |
| Chloroacetic acid, mono, flake, 99%, purif., dms., c.l | lb. | .23½ | .25¼ |
| dms. t.c.l. | lb. | .24½ | — |
| tech., flake, 96-97%, dms., c.l., frt. equald | lb. | .19 | — |
| dms., t.c.l., frt. equald | lb. | .20 | — |
| 2-Chloro-4-aminotoluene, tech., liq., dms., frt. alld | lb. | 1.03 | — |
| 4-Chloro-2-aminotoluene, fused, bbls. | lb. | 1.38 | — |
| 6-Chloro-2-aminotoluene, tech., liq., dms., frt. alld | lb. | .66 | — |
| m-Chloroaniline, dms., c.l., frt. alld. | lb. | .75 | — |
| dms., t.c.l., same basis | lb. | .77 | — |
| tanks, same basis | lb. | .73 | — |
| o-Chloroaniline, dms., c.l., frt. alld | lb. | .52 | — |
| dms., t.c.l., same basis | lb. | .54 | — |
| tanks, same basis | lb. | .50 | — |
| p-Chloroaniline, dms., c.l., frt. alld. | lb. | .77 | — |
| dms., t.c.l., same basis | lb. | .79 | — |
| o-Chlorobenzaldehyde, dms., t.l., works | lb | 1.05 | — |
| dms., t.t.l., same basis | lb. | 1.20 | — |
| o-Chlorobenzaldehyde, dms., t.c.l., works | lb. | 1.95 | — |
| o-Chlorobenzoic acid, fib. dms., t.l., works | lb | 1.10 | — |
| fib. dms., smaller lots, works | lb. | 1.25 | — |
| p-Chlorobenzoic acid, fib dms., 2,000-lbs. or more, works. | lb. | 2.25 | — |
| fib. dms., less than 2,000-lbs., same basis | lb | 2.30 | — |
| Chloroform, tech., dms., c.l., dlvd. E | lb. | .18 | — |
| dms., t.c.l., same basis | lb. | .19 | — |
| tanks, same basis | lb. | .17 | — |
| USP, dms., c.l., dlvd | lb. | .27 | — |
| dms., t.c.l., dlvd. | lb. | 30 | — |
| tanks, minimum 4,000 gals. dlvd. | lb. | .25 | — |
| 2-Chloro-4-nitroaniline, paste, dlvd. E., 100% basis | lb. | .90 | — |
| Powd., dlvd. E., 100% basis | lb. | 1.00 | — |
| 4-Chloro-2-nitroaniline, powd. dlvd. E | lb. | .86 | — |
| 4-Chloro-2-nitrophenol, tech., paste, dms., frt. alld | lb. | .75 | — |
| 4-Chloro-2-nitrotoluene, tech., solid, dms., frt. alld | lb. | .99 | — |
| 5-Chloro-2-nitrotoluene, tech., sond, dms., frt. alld | lb. | .25 | — |
| o-Chlorophenol, dms., c.l., frt. equald | lb. | .37 | — |
| dms., t.c.l., same basis | lb. | .38 | — |
| p-Chlorophenol, dms., c.l., frt equald | lb. | .37 | — |
| dms., t.c.l., same basis | lb. | .38 | — |
| Chloropicrin, coml., cyls., 180 lbs., frt alld | lb | 1.07 | — |
| cyls., 100 lbs., same basis | lb | 1.08 | — |
| cyls., 50 lbs., same basis | lb | 1.14 | — |
| Chlorosulfonic acid, dms., c.l., frt. equald | lb. | .0465 | — |
| dms., t.c.l., frt. equald | lb. | .0515 | — |
| tanks, frt. equald | lb. | .0415 | — |
| Chlorosulfonic acid, in stainless steel dms. ½c. per lb higher | | | |
| o-Chlorotoluene, tech., dms., t.l., works | lb. | .37 | — |
| dms., t.c.l., t.t.l., same basis | lb. | .38 | — |
| Choline bitartrate, 100-lb. dms., frt. equald | lb. | 1.25 | — |
| Choline chloride, 100-lb dms., frt. equald | lb. | 1.25 | — |
| Choline dihydrogen citrate, 100-lb. dms., frt. equald | lb. | 1.25 | — |
| Chrome green, CP, dark, light medium blue content, 1-15%, bbls., dlvd E of Rockies. | lb. | .43 | — |
| blue content, 16-30%, bbls., same basis | lb. | .44 | — |
| Chrome green, medium blue content, 41-45%, bbls., same basis | lb. | .44 | — |
| blue content, 45-49%, bbls., same basis | lb. | .45 | — |
| reduced color 25%, bbls., same basis | lb. | .20 | — |
| Chrome green prices 1c higher W of Rockies. | | | |
| Chrome orange, CP, bbls., dlvd E of Rockies | lb. | .35 | — |
| Chrome orange prices 1c higher W of Rockies. | | | |
| Chrome yellow, CP, bbls., dlvd E. of Rockies | lb. | .35 | — |
| Chrome yellow price 1c. higher W of Rockies. | | | |
| Chromic acid, 99¾%, dms., c.l., works, frt. equald | lb. | .29½ | — |
| dms., t.c.l., dlvd, N. Y. Metropolitan area | lb. | .30 | .31 |
| Chromic acid, NF (see Chromium trioxide) | | | |
| Chromium acetate, soln., 7½%, dms., 500-2,000-lb lots, works. | lb. | .10 | — |
| Chromium fluoride, bbls., works | lb. | .51 | .58 |
| Chromium oxide, hydrated, bbls., fib dms., c.l. frt alld. | lb. | 1.20 | — |
| Pure, bgs., c.l., frt alld | lb. | 44½ | — |
| bgs., t.c.l., same basis | lb. | 45¼ | — |
| Chromium trioxide, NF, bots | lb. | 1.15 | — |
| Cinchona bark, NF, red, broken, bgs | lb | .25 | — |
| NF yellow broken, bgs | lb | .35 | .40 |
| Cinnamic acid, refd., bots | lb | 2.50 | 3.50 |
| Cinnamic alcohol, bots | lb. | 1.50 | 1.60 |
| Cinnamic aldehyde dms | lb | .80 | 1.00 |
| Cinnamon, Ceylon, No. 2, bgs | lb. | .53 | — |
| Ceylon, No. "0000," bgs. | lb. | .73 | — |
| Cinnamon bark oil, bots | lb | 42.00 | 48.00 |
| Cinnamon leaf oil, crude, dms | lb | 1.60 | 2.00 |
| USP (Cassia), cns., dms | lb | 8.50 | 13.50 |
| Citral, CP, bots. | lb | 4.50 | 5.00 |
| Extra, bots. | lb | 3.60 | 5.00 |
| Syn., dms. | lb | 7.25 | 7.40 |
| Citric acid USP anhyd., fine gran., bgs., dms., c.l | lb. | 29½ | .30 |
| bgs. dms., 10,000-lb lots, shipt | lb. | .30 | .30½ |
| bgs., dms., smaller lots | lb. | .30½ | .31 |


**THEY ALL LIVE HERE...** Miles has three bell-ringers. Push any button and things happen. For example, current projects involving aralkyl (benzyl) amines - both in production and in pilot-plant stage - are developing a growing list of applications as antioxidants and chemical intermediates. Enzymes, in addition to many industrial applications, are opening new doors in the packaging, storing and distribution of processed foods. They also have produced remarkable results as livestock feed supplements. Expanded production capacity for citric acid makes more of this versatile acid available to a growing market. Write and ring one of our bells - we'll tell you more.

**Miles Chemical Company**
DIVISION OF MILES LABORATORIES, INC.
ELKHART, INDIANA COngress 4-3111

| | | | |
|---|---|---|---|
| Citric acid, USP, hydrous, fine gran., bgs., dms., c.l. | lb. | .27½- | .28 |
| bgs., dms., 10,000-lb. lots, 1 shipt. | lb. | .26 | .26½ |
| bgs., dms., smaller lots | lb. | .29 | .29½ |
| Powdered citric acid ½c. per lb. higher. | | | |
| Citronella oil, Ceylon, dms. | lb. | 1.00 | — |
| Java-type, dms. | lb. | 1.00 | - 1.20 |
| Citronellal, bots., dms. | lb. | 1.40 | - 1.60 |
| Citronellol, bots., dms. | lb. | 1.90 | 2.50 |
| Synthetic, dms. | lb. | 1.70 | - — |
| Civet, artif., bots. | lb. | 13.75 | -15.00 |
| Nat., bots. | oz. | 8.50 | -15.00 |
| Clay, ball, dom., airfloated, bgs., c.l., Tenn | ton. | 17.50 | -21.50 |
| crushed shed moisture, bulk, c.l., Tenn | ton. | 8.00 | -11.25 |
| imp. airfloated, bgs., c.l., Atl. port | net-ton. | 43.00 | -47.00 |
| lump, bulk, Atl. port | net-ton. | 31.50 | -37.50 |
| Clay, China, dom., dry-grd., airfloated, 99%, 325 mesh, Georgia, bgs., c.l., works. | ton. | 11.00 | -17.00 |
| Georgia bgs., l.c.l., works. | ton. | 13.50 | -22.50 |
| Imp., white, lump, bulk, c.l., ex-dock, Philadelphia, Portland, Me. | long-ton. | 23.00 | -35.00 |
| white, powd. bgs. c.l., ex dock | net-ton. | 50.00 | — |
| bgs., l.c.l. ex whse | net-ton. | 60.00 | -70.00 |
| Cleaners naphtha, petroleum, 105°F Flash, tankcars, New Jersey and New York | gal. | 18 | — |
| Group 3 | gal. | .12373- | — |
| Houston, Texas | gal. | .145 | — |
| 140°F Flash, tankcars, New Jersey or New York | gal. | .205 | - — |
| Group 3 | gal. | .154 | - — |
| Houston Texas | gal. | .17 | - — |
| Cleve's acid tech., mixed, solid, dms., frt. alld | lb. | 1.03 | - — |
| 1.6, tech. solid, dms. frt. alld | lb. | .77 | - — |
| 1.7, tech., dms. frt alld. | lb. | 2.20 | - — |
| Clove bud oil, USP, dms. | lb. | 2.65 | - — |
| Cloves, Madagascar, bgs. | lb. | .35 | - — |
| Zanzibar, bgs. | lb. | .37 | - — |
| Clove leaf oil, crude, dms. | lb. | 1.10 | - — |
| CMC, crude, 96.4% low or medium vis bgs., 23,000 lbs., dvld. E., 100% basis | lb. | .40 | - — |
| 96.4% low, or medium vis., bgs., less than 23,000 lbs., dlvd. E., 100% basis | lb. | .42 | - .46 |
| 65%, low or medium vis., bgs., c.l., dlvd. E., 100% basis | lb. | .40 | - — |
| l.c.l., dlvd. E., 100% basis | lb. | .42 | - 1.00 |
| purif., high vis. (see Cellulose gum). | | | |
| CMC prices W. of the Rockies are 1c. per lb. higher and are on a dlvd. basis. | | | |
| Coaltar, crude, resale for soln., tanks, works | gal. | .17 | - — |
| Refd., resale, indust., dms., c.l., ex whse | gal. | .35 | - — |
| dms., t.c.l., ex whse | gal. | .39 | - — |
| tanks works | gal. | .20½- | — |
| Coaltar pitch, aluminum, bulk, Works | ton. | 42.00 | - — |
| Carbon, bulk works | ton. | 42.00 | - — |
| Indust., bulk, works | ton. | 44.00 | - — |
| Core bulk works | ton. | 40.50 | - — |
| Fiber, bulk works | ton. | 48.00 | - — |
| Roofing, 140-155°F., Federal Specification RP-381 Type 1 tanks, works | ton. | 41.00 | - — |
| Cobalt acetate 23.7% Co., dms., dlvd | lb. | 1.04 | - — |
| Cobalt blue, genuine, 250 lb. bbls., dlvd E. of Rockies | lb. | 4.90 | - — |
| Cobalt blue prices 1c. higher W. of Rockies | | | |
| Cobalt blue imitation (see Ultramarine blue). | | | |
| Cobalt carbonate, 48% Co., powd., bgs., dlvd | lb. | 1.43 | - — |
| Cobalt chloride, 24.2% Co., dms., dlvd | lb. | .93 | - — |
| Cobalt hydrate, 60-61% Co., dms., dlvd | lb. | 1.97 | - — |
| Cobalt linoleate, fused 8½% Co., dms. | lb. | .71½- | — |
| Liq., 6% Co., dms. | lb. | .57½- | — |
| Cobalt metal, 99% dms., f.o.b. carrier | lb. | 1.50 | - — |
| Cobalt naphthenate, liq., 6% Co., dms., dlvd | lb. | .48¾- | — |
| Cobalt nitrate 20.1% Co., bbls., dlvd. | lb. | .73 | - — |
| Cobalt oxide, black, ceramic grade, 72½-73½% Co., kgs., dlvd E of Mississippi R. | lb. | 1.15 | - — |
| 70-71% Co kgs., same basis | lb. | 1.12 | - — |
| Cobalt oxide prices W. of Mississippi R. 2c. per pound higher. | | | |
| Cobalt phosphate, powd., 32.1% Co., dms., dlvd | lb. | 1.35 | - — |
| Cobalt resinate, fused, 3% Co., dms. | lb. | .36½- | — |
| Cobalt sulfate, cryst., 21% Co., dms., dlvd | lb. | .44 | - — |
| Monohydrated, 33% Co., dms., dlvd | lb. | 1.09 | - — |
| Cobalt tallate, 6% Co., dms., dlvd. | lb. | .44 | - — |
| Cocaine, USP, ens., 100-oz. lots, f.o.b. works | oz. | 17.50 | - — |
| Cocaine hydrochloride, ens., 100-oz. lots f.o.b. works | oz. | 13.75 | - — |
| Cocillana bark bls. | lb. | .18 | - .20 |
| Cocoa butter, bgs. | lb. | .54 | - .59 |
| Coconut oil, crude, tanks, New York | lb. | .12¾- | — |
| tanks, Pac. coast | lb. | .11⅛- | — |
| Refd., deodorized, dms. | lb. | .19 | - .20 |
| Coconut oil acids, dist., dms. | lb. | .21½- | .24 |
| tanks | lb. | .19 | - — |
| double dist. (stripped), dms. | lb. | .22½- | .25 |
| tanks | lb. | .20 | - — |
| Cod oil, dms., spot | lb. | .08¼- | .08⅛ |
| Codeine, NF cns., 100-oz. lots | oz. | 13.25 | - — |
| Codeine hydrochloride cns., 100-oz. lots | oz. | 11.75 | - — |
| Codeine phosphate, USP, cns., 100-oz. lots | oz. | 10.25 | - — |
| Codeine sulfate, USP, cns., 100-oz. lots | oz. | 10.75 | - — |
| Codliver oil, USP, dms. | gal. | 1.40 | - 1.70 |
| Cohosh root, black, bls. | lb. | .20 | - .25 |
| Blue, bls. | lb. | .20 | .25 |
| Colchicine, USP, bots. | | 37.50 | -39.00 |
| Colchicum root bls. | lb. | .35 | .45 |
| Colchicum seed, bgs. | lb. | .85 | - .90 |
| Collodion, USP, dms. | lb. | .32½- | — |
| USP flexible dms. | lb. | .34 | - — |
| Colocynth pulp bls. | lb. | .75 | - — |
| Colombo root, bls. | lb. | .16 | - .18 |
| Condurango bark bls. | lb. | .18 | - .20 |
| Congo copal gum, No. 1, bgs. | lb. | .26 | - .27 |
| No. 2, bgs. | lb. | .23 | - .25 |
| No. 3, bgs. | lb. | .21 | - .24 |
| Copaiba balsam, ens., dms. | lb. | .80 | - .90 |
| Copaiba oil cns. | lb. | 1.35 | 2.00 |
| Copper acetate bbls., c.l., works. | lb. | .53 | - — |
| bbls., t.c.l., works | lb. | .54 | - — |
| Copper carbonate, 55%, dark dense, works | lb. | 34.33 | - — |
| bgs., t.c.l., works | lb. | 35.85 | - — |
| Copper chloride, cupric, anhyd., dms., works | lb. | .43½- | .44 |
| cryst., dihydrate, dms., works. | lb. | .29¼ | .30¼ |
| cryst., dried, dms., works | lb. | .37¼- | .38½ |
| cuprous, dms., works | lb. | .3835- | .4153 |
| Copper cyanide tech., dms., 20,000-lb lots or more | lb. | .609 | - — |
| dms., 1,000-lb lots or more | lb. | .619 | - — |
| dms., smaller lots | lb. | .639 | - .66 |
| Copper gluconate, dms | lb. | 2.20 | - — |
| Copper hydrate, dry, dms., c.l., frt. E. of Miss | lb. | .52½- | — |
| dms., t.c.l., same basis | lb. | .53 | - — |
| Copper metal, electrolytic, dlvd. Valley, basis | lb. | .29 | - — |
| Copper naphthenate, liq., 8% Cu. dms. frt alld | lb. | .26½- | — |
| Copper nitrate, tech., cryst., dms., works | lb. | .30¾ | .32¾ |
| Copper oleate, solid, 9% Cu, dms., works | lb. | .43 | - — |
| Copper oxide, black, bbls., 100-5,000-lb. lots, works | lb. | .46 | - — |
| red, 97%, USP Type 1, bbls., 100-5,000-lb. lots | lb. | .46½- | — |
| 90%, USN Type II, bbls., 100-5,000-lb. lots or more, works | lb. | .45½- | — |
| Copper quinolinolate, 18% Cu, dms., ton lots | lb. | 4.25 | - — |
| 10% active quinolinolate, dms | lb. | 1.14 | - 1.15 |
| Copper resinate, precip., dms., frt. alld | lb. | .47 | - — |
| Copper sulfate, CP, gran., dms., works | lb. | .1885- | — |
| Cryst., 99%, bgs., c.l., works. | 100 lbs. | 12.00 | - — |
| bgs., l.c.l., works | 100 lbs. | 12.50 | -15.00 |
| Copper sulfate, monohydrated, 35%, dms., c.l., works | 100 lbs. | 22.65 | - — |
| dms., l.c.l., works | 100 lbs. | 23.40 | - — |
| Tribasic, distributors, bgs., c.l., works | 100 lbs. | 29.10 | - — |
| bgs., l.c.l., works | 100 lbs. | 30.60 | - — |
| Copper undecylenate, dms | lb. | 2.75 | - — |
| Copra, Atl., Gulf ports, c.i.f. | ton. | 157.50 | - — |
| Pac. ports, c.i.f. | ton. | 152.50 | - — |
| Coriander oil, USP, bots. | lb. | 6.50 | - 7.25 |
| Coriander seed, Moroccan, bgs | lb. | .18 | - — |
| Rumanian, bgs. | lb. | .14 | - — |
| Yugoslavian, bgs. | lb. | .08½- | — |
| Corn oil, crude, tanks, works | lb. | .17¼- | .17⅝ |
| Foots, (soapstock acid 95%) tanks, New York | lb. | .06 | Nom. |
| Refd., salad, dms. | lb. | .2323- | .2350 |
| tanks | lb. | .2123- | — |
| Corn oil acids, dist., dms. | lb. | .15½- | .18 |
| tanks | lb. | .13 | - — |
| Corn sugar, tanners, chipped, paper bgs., c.l., 60,000 lbs. min. | 100 lbs. | 7.30 | - — |
| paper bgs., t.c.l. | 100 lbs. | 7.45 | - — |
| Corn syrup, 43° Be., tanks, dlvd. N.Y | 100 lbs. | 6.30 | - — |
| non-ret. dms., c.l., same basis. | 100 lbs. | 7.23 | - — |
| Corrosive sublimate (see Mercuric chloride). | | | |
| Cortisone acetate, USP, bots., kilo or more | gram. | .93 | - 1.75 |
| Costus oil, bots. | oz. | 6.00 | — |
| Cottonseed meal, 41%, bgs. Memphis | ton. | 55.00 | -55.50 |
| Cottonseed oil, crude, tanks, South, East | lb. | .14 | Nom. |
| tanks, Valley | lb. | .13¾- | — |
| tanks, Texas, Waco | lb. | .13½ | Nom. |
| Foots (soapstock, acid 95%), New York, tanks | lb. | .03¾- | — |
| Refd., salad, dms. | lb. | .19 | - .19¼ |
| tanks, salad, dms. | lb. | .17 | - — |
| Cottonseed oil acids, dist., dms | lb. | .15½- | .18 |
| tanks | lb. | .13 | - — |
| Coumarin, NF, cryst., dms. | lb. | 3.30 | - 3.40 |
| Cramp bark, NF, bls. | lb. | .90 | - 1.00 |
| Cream of tartar (see Potassium bitartrate). | | | |
| Creosote carbonate, NF, bots. chys., | lb. | 3.05 | 3.26 |
| Creosote, coaltar, crude, tanks, works, frt. adjusted | gal. | .24 | — |
| Crude, soln 80%, tanks, works. | gal. | 226 | — |
| Refd., dms., c.l., works. | gal. | 50 | — |
| dms., l.c.l., same basis | gal | 62 | — |
| tanks, same basis | gal | 58 | — |
| West Coast creosote prices computed on a basis of 24c. per gallon for straight oil and 20c per gallon for coaltar | | | |
| Creosote, beechwood, chys., dms., f.o.b. works, dlvd. in Metropolitan area | lb | 1.72 | 1.77 |
| Hardwood, NF chys. dms. same basis | lb | 1.42 | 1.47 |
| Pinewood dms. incl. c.l., works. | lb. | .0611- | — |
| dms. incl., l.c.l., works | lb. | .0684 | — |
| dms. incl., l.c.l. ex whse, New York | lb. | .0795- | — |
| tanks, works | lb. | .0511- | — |
| Creosote oil (see Creosote coaltar). | | | |
| Cresol, tech. 50% below 204°C., dry above 207°C., wide distillation range non-ret. dms., c.l., frt. alld | lb. | 16½ | — |
| non-ret dms., l.c.l., same basis | lb. | .17½ | — |
| tanks, same basis | lb. | .165 | — |
| USP, 50% 204°C., dry above 207°C., wide distillation range non-ret. dms., c.l., same basis | lb. | .18 | - — |
| non-ret. dms., t.c.l., same basis. | lb. | .19 | - — |
| tanks, same basis | lb. | .16 | - — |


# TENNESSEE CORPORATION

We mine Copper, Sulfur, Iron and Zinc and are basic producers of their chemical derivatives. Our basic position in these elements is your assurance of exacting quality control from raw materials to finished product.

## COPPER
## SULFUR
## IRON
## ZINC
## MANGANESE
## FLUORINE

Copper Carbonate
Copper Sulfate
Copper Sulfate, Monohydrated
Chlorosulfonic Acid
Para Toluene Sulfonic Acid, Anhydrous
Sodium Hydrosulfite
Sulfonates
Sulfonic Acids
Sulfur Dioxide
Sulfuric Acid
Ferric Iron Sulfate
Zinc Oxide
Zinc Sulfate, Monohydrated
Manganese Sulfate
Manganous Oxide
Potassium Silicofluoride
Sodium Silicofluoride

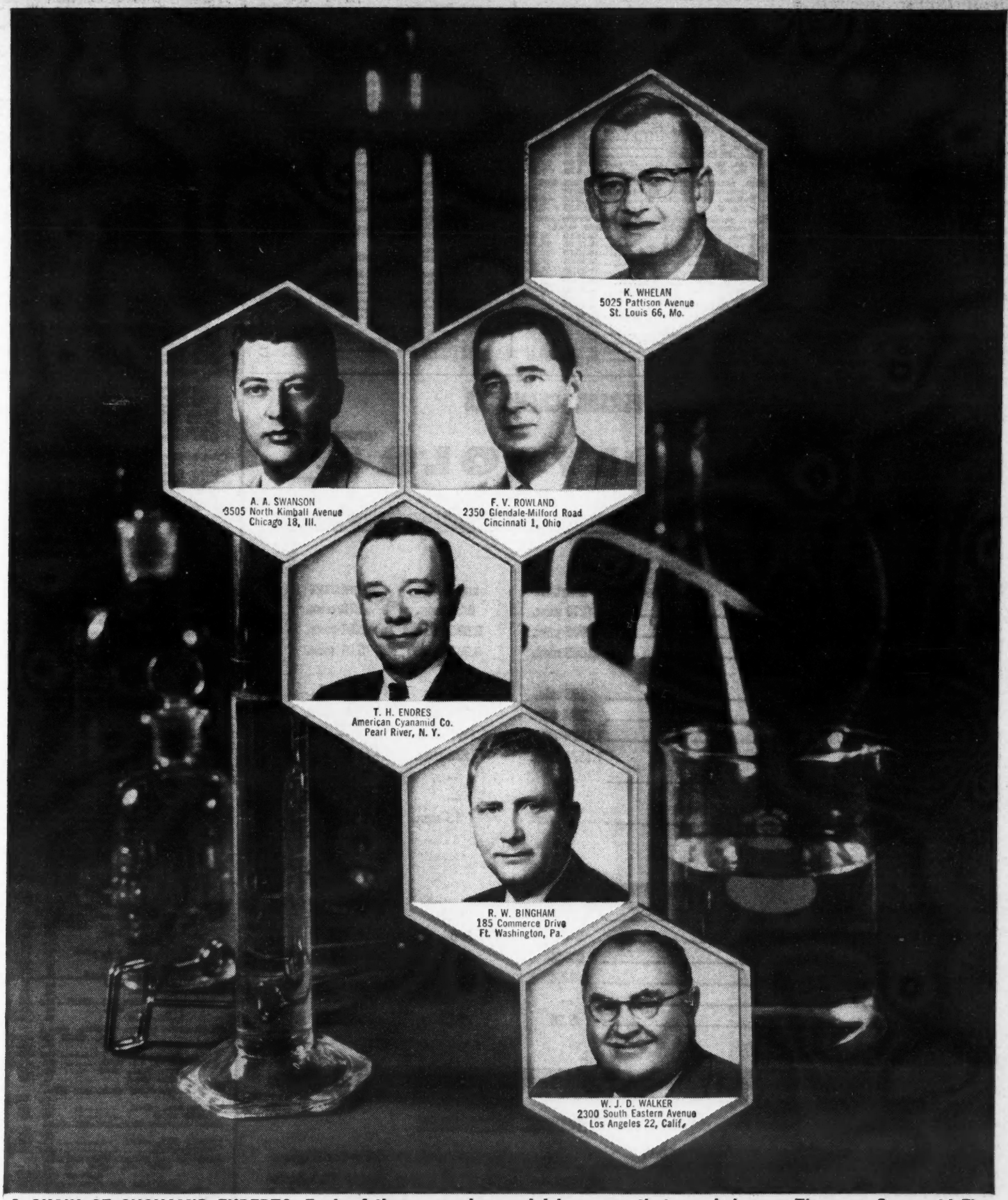
TENNESSEE CORPORATION
612-620 Grant Building, Atlanta 3, Georgia

TC

m-Cresol, 95-98% dms., c.l., works lb. .80 : —
dms., l.c.l., works lb. .61 : —
m-p-Cresol, 5-95% 3°C., dms., c.l., frt. equald lb. .18 : —
dms., l.c.l., same basis lb. .19 : —
tanks, same basis lb. .16 : —
2.07% 3°C. dms. c.l. frt. equald. lb. .22 : —
dms., l.c.l., same basis lb. .23 : —
tanks same basis lb. .20 : —
o-Cresol 30.5°C m.p and over, ret., dms c.l., frt equald lb. .17 : —
ret dms., l.c.l., same basis lb. .18 : —
tanks, same basis lb. .15 : —
30° 30.49°C m.p. dms., c.l., frt. equald lb. .16½ : —
ret. dms., l.c.l., same basis lb. .17½ : —
tanks same basis lb. .14½ : —
29°-29.9°C. m.p., dms., c.l., frt. equald lb. .16 : —
ret dms., l.c.l., same basis lb. .17 : —
tanks, same basis lb. .14 : —
25°-28°C m.p. dms. c.l., frt. equald lb. .15 : —
ret dms., l.c.l. same basis lb. .16 : —
tanks same basis lb. .13 : —
p-Cresol 98% dms. c.l., dlvd lb. .52 : —
dms., l.c.l. dlvd lb. .53 : —
tanks, dlvd lb. .49 : —
2,3-Cresotic acid dms. ton lots, works lb. 70 : —
dms., smaller lots, works lb. 72 : —
p-Cresyl methyl ether, cns lb. 1.80 2.05
Cresylic acid, coaltar, dom., meta-para content above 25%, resins and tricresyl phosphate grades dms., c.l., t.l., frt equald gal. 1.35 : —
dms., l.c.l., same basis gal. 1.40 : —
tanks, same basis gal 1.15 : —
metapara content 25% or less, dms. c.l. t.l. same basis gal. 1.20 : —
dms., l.c.l. same basis gal 1.25 : —
tanks, frt. equald gal 1.00 : —
Imp., metapara content 25% or less, f.o.b works, frt. equald. to competitive points. 50 dms or more. gal. 1.03½ : —
less than 50 dms., same basis gal. 1.05 1.15
tanks, same basis gal. 1.00 —
Crotonaldehyde 91-93% dms., l.c.l, works lb. .25 : —
Crotonic acid, dms., 200 lbs. or more, l.c.l., dlvd lb. .36 : —
Cryolite, nat., indust., bgs., c.l., works 100 lbs. 13.00 : —
bgs., l.c.l. works 100 lbs. 14.25 : —
Cube root, powd., 5% rotenone, bgs., t.l., works lb. .21 : —
bgs. t.l., works lb .22 : —
Cubeb berries, NF, bgs. lb. 1.30 : —
Powd., cs. lb. 1.45 : —
Cubeb oil, cns lb 8.75 9.00
Cumene, dms. c.l., works lb. .12 : —
dms., l.c.l., works lb. .14 : —
tanks, works lb .11 : —
Cumin seed, Iranian, bgs. lb. .19 : —
Moroccan, bgs. lb. .36 : —
Turkish, bgs. lb. .8 : —
Cumin seed oil, bots., cns lb. 15.50 17.00
Cyanamide, tertilizer, mixing grade, 21% N, gran., bgs., Niagara Falls, Ont., contract. ton. 37.00 : —
Fertilizer, pulv., 21% N, bgs., works unit-ton 2.85 : —
Indust, grade, bgs., c.l., works. ton. 75.00 : —
bgs., l.c.l., works ton. 96.00 : —
Indust grade 6-16 mesh, dms. c.l., works ton. 120.00 : —
dms. l.c.l., works ton 140.00 : —
Cyclohexane, 99%, tech., dms., c.l., dlvd. E of Rockies gal 1.02 : —
dms. l.c.l. same basis gal. 1.10 : —
dms. c.l., dlvd W of Rockies gal. 77 : —
dms., l.c.l., same basis gal. .85 : —
tanks, works gal. 55 : —
98% tech. 40-dm. lots or more, f.o.b works gal. .56 : —
5-39 dms. same basis gal. 60 : —
tanks, same basis gal. .36 : —
Cyclohexanol, tech., dms., c.l., works, frt. alld. E lb. .30½ : —
dms., l.c.l., works, same basis. lb. .31½ : —
tanks, works, same basis lb. .28 : —
Cyclohexanone tech., dms., c.l., works lb. .33½ : —
dms., l.c.l., works lb. .34½ : —
tanks, works lb .31 : —
Cyclohexylamine, tech., dms., c.l., works lb. .49 : —
dms., l.c.l., works lb. .50 : —
tanks, works lb. .47 : —
Cypress oil, bots. lb. 5.30 : —

## D

2,4-D tech., bgs., dms., c.l., works, frt equald lb 40 —
bgs. dms. l.c.l. same basis lb 45 49
2,4-D butyl ester dms. c.l. works lb. 43 —
dms., l.c.l., same basis lb 48 52
tanks, same basis lb 48 52
2,4-D isopropyl ester, dms., c.l., works lb 43 —
dms., l.c.l., works lb. 48 52
tanks works lb 42 —
Dammar gum, Batavia, A E. cs lb No stocks.
East India Batu, bold, bgs lb. .15½ .18
nubs and chips, bgs lb. .10 .11
black, bold, bgs lb. .16 .18
nubs and chips, bgs lb. .13 .14½
unscraped bgs. lb .13 .14½
pale, chips, bgs lb. .16 .18
pale nubs, bgs. lb 20¾ .24
Siam cs lb .31½ .34
Singapore, No. 1, bgs. lb. .38 .44
No 2, bgs. lb. .29 .32
dust, bgs. lb .18 .20
No 3, bgs. lb No stocks.
Dandelion root, bls lb. .35 .40
DDD, tech. flake, grd., fib. dms., c.l., works lb. .45 .47
fib dms., l.c.l. works lb. .46 .48
DDT, flake or lump, bgs., c.l., dlvd lb .23 : —
bgs. smaller lots, same basis. lb .25 : —
fib dms. c.l., same basis lb .24 : —
fib dms., smaller lots, same basis lb .26 : —
Powdered DDT 1c. per pound higher.
DDVP (see Dimethyl dichlorovinyl phosphate)
l-Decanol, tech., dms. c.l., dlvd E. lb. 43½ —
dms., l.c.l., dlvd E. lb. 45½ —
tanks, dlvd E lb. 41 —
Decyl alcohol, mixed isomers, dms., c.l., dlvd lb. .23½ —
dms., l.c.l., dlvd. lb. .25 —
tanks, dlvd. lb .21 —
Perfume grade, bots. lb 1.00 2.00
Decyl alcohol, normal (see l-Decanol)
Deertongue leaves, bls. lb. .50 : .60
Defluorinated phosphate, feed grade, 14% P, paper bgs., c.l., t.l., Tupelo, Miss. ton. 52.00 : —
18% P, paper bgs., c.l., Plant City, Fla. ton. 61.25 : —
paper bags, c.l., works, Miss. ton. 66.00 : —
19% P, paper bgs., c.l., t.l., works, Houston, Tex ton. 66.35 : —
Prices of defluorinated phosphate in bulk $3 per ton less than bg. c.l. prices.
Degras, common (15-17% free fatty acid), 400-lb. dms lb. .12 : .14
Neutral (over 2% free fatty acid), 400-lb. dms lb. 13 : —
Denatured alcohol, ethyl, CD-12, CD-13, CD-14, CD-17, dms., c.l., dlvd E of Rockies, dms., l.c.l., same basis gal. .69½ : —
tanks, dlvd, same basis gal. .74½ : .80½
Tankcar sales require written authorization by Alcohol and Tobacco Tax Division.
Denatured alcohol, ethyl, proprietary solvent, dms., c.l., dlvd E. of Rockies gal. .72 : —
dms., l.c.l., same basis gal. .77 .83
tanks, same basis gal. .56 —
Tankcar sales require written authorization by Alcohol and Tobacco Tax Division.
Denatured alcohol, ethyl, SD1, dms., dlvd E of Rockies gal. .70½ : —
dms., l.c.l. same basis gal. .75½ : .81½
tanks, same basis gal. .54½ : —
SD2B, dms. c.l. dlvd. E. of Rockies gal. .69 : —
dms., l.c.l., same basis gal. .74 : .80
tanks, same basis gal. .53 : —
SD3A, dms. c.l., dlvd. E. of Rockies gal. .68 : —
dms. l.c.l. same basis gal. .73 : .79
tanks, same basis gal. .52 : —
SD23A, dms., c.l., dlvd. E. of Rockies gal. .70½ : —
dms., l.c.l., same basis gal. .75½ : .81½
tanks same basis gal. .54½ : —
SD23H, dms., c.l., dlvd. E. of Rockies gal. .71 : —
dms., l.c.l., same basis gal. .76 : .82
tanks, same basis gal. .55 : —
Denatured alcohol, SD29, dms., c.l., dlvd. E. of Rockies gal. .69½ : —
dms l.c.l. same basis gal. .74½ : .80½
tanks, same basis gal. .53½ : —
SD30, dms., c.l., dlvd. E. of Rockies gal. .68 : —
dms., l.c.l., same basis gal. .73 : .79
tanks, same basis gal. .52 : —
SD23H, dms., c.l., dlvd. E. of Rockies gal. .71 : —
dms., l.c.l., same basis gal. .76 : .82
tanks, same basis gal. .55 : —
SD-40, dms., dlvd. E. of Rockies, gal. .70½ : —
dms., l.c.l., same basis gal. .75½ : .81½
tanks, same basis gal. .54½ : —
For anhyd. alcohol on above formulas prices are 7c. per gal higher
West coast dlvd prices are the same as eastern prices, except in Idaho, Montana, Oregon, and Washington where a 5c. differential on tankcars is maintained.
d-Desoxyephedrine hydrochloride, dms lb. 15.00 17.00
dl-Desoxyephedrine hydrochloride, dms lb 6.60 : —
Dextrin, corn, gum, paper bgs., c.l., 100 lbs. 9.39 : —
paper bgs., l.c.l. 100 lbs. 9.54 : —
canary dark, paper bgs., c.l., 100 lbs. 9.23 : —
paper bgs., l.c.l 100 lbs. 9.38 : —
indust, grade, 6-16 mesh, canary light, paper bgs., c.l. 100 lbs. 9.13 : —
paper bgs., l.c.l 100 lbs. 9.28 : —
white paper bgs., c.l 100 lbs. 8.97 : —
paper bgs., l.c.l 100 lbs. 9.12 : —
Corn dextrin in cotton bgs. 15c. per 100 lbs higher
Dextrose, anhyd., comi., bgs., c.l. 100 lbs. 8.65 : —
bgs., l.c.l 100 lbs. 8.80 : —
Anhyd. special, aluminum foil lined fib. dms., 200-lb. dms 100 lbs. 14.70 : —
100-lb. dms. 160 lbs. 15.20 : —
Hydrated, comi., bgs., c.l., ex whse 100 lbs. 7.45 : —
bgs. c.l., ex whse 100 lbs. 7.60 : —
USP, dms. lb. .19¾ : —
Diacetone alcohol, acetone-free, dms., c.l., dlvd lb. .15½ : —
dms., l.c.l. dlvd. lb. .17 : —
tanks, dlvd lb. .13 : —
Tech., dms., c.l., dlvd. lb. .15 : —
dms. l.c.l., dlvd. lb. .16½ : —
tanks, dlvd lb. .12½ : —
Diacetyl, flavor grade, bots lb. 3.30 4.30
Di-sec-amyl phenol, dms., c.l., works lb. .32 : —
dms., l.c.l. works lb. .33 : —
tanks works lb. .29½ : —
Di-tert-amyl phenol, dms., c.l., works lb. .32 : —
dms., l.c.l., works lb. .33 : —
tanks, works lb. .29½ : —
Diallylamine, dms., c.l., dlvd. lb .98½ : —
dms. l.c.l., dlvd. lb 1.00 : —
tanks, dlvd lb. .96 : —
o-Dianisidine dry, tech., fib. dms. lb 2.00 : —
Dibenzyl sebacate, dms., c.l., works. lb. .93 : —
dms., l.c.l., same basis lb. .94 : —
tanks, same basis lb. .91 : —
Dibromobenzene, bgs., 500-lb. lots. lb. .55 : —
2,6-Di-tert-butyl-p-cresol, teed grade, c.l., t.l., dms., dlvd lb. .65 : —
t.t.l., dms., same basis lb. .68 : —
Food grade, c.l., t.l. dms., dlvd. lb. .65 : —
dms. t.t.l., same basis lb. .68 : 1.10
Tech., dms., c.l., t.l., dlvd. lb. .57 : —
dms., l.c.l., same basis lb. .60 : —
tanks, same basis lb. .54 : —
Dibutyl fumarate, dms., c.l., t.l., dlvd. E lb. .31½ : —
dms., l.c.l., t.t.l., dlvd. E lb. .33 : —
tanks, dlvd E lb. .29 : —
Dibutyl maleate, dms., c.l., t.l., dlvd. E lb. .31½ : —
dms., l.c.l., t.t.l., dlvd. E lb. .33 : —
tanks, dlvd E lb. .29 : —
Dibutyl phthalate, dms., c.l., dlvd. E lb. .31½ : —
dms., l.c.l., same basis lb. .33 : —
tankcars, tanktrucks, 2,000 gals., same basis lb. .29 : —
tanktrucks, 1,000-1,999 gals., same basis lb. .29 : —
Dibutyl sebacate, dms., c.l., works. lb. .67½ : —
dms., l.c.l., works lb. .68½ : —
tanks, works lb. .65½ : —
Dibutyl tartrate, dms., works, frt. alld lb. .85¼ : —
Dibutylamine, dms., c.l., dlvd lb. .85½ : —
dms., l.c.l., same basis lb. .87 : —
tanks, same basis lb. .83 : —
Dicapryl phthalate, dms., c.l., dlvd. lb. .38½ : —
dms., l.c.l., dlvd. lb. .30 : —
tanks, dlvd. lb. .26 : —
Dicapryl sebacate, dms., c.l., works. lb. .63 : —
dms., l.c.l., works lb. .63½ : .64
tanks, works lb. .61 : —
2,5-Dichloroaniline, dms., works lb. .83 : —
3,4-Dichloroaniline, tech., solid, tanks, frt. alld lb. .73 : —
o-Dichlorobenzene, dms., c.l., frt. alld. E lb. .12¾ : —
dms., l.c.l., same basis lb. .13¾ : —
tanks, same basis lb. .11 : —
p-Dichlorobenzene, dms., c.l., f.o.b., works, frt. alld. E lb. .12 : —
dms. 2,000 lbs. or more same basis lb. .14½ : —
1,4-Dichlorobutane, dms., c.l., or t.l., works lb. .33½ : —
dms., l.c.l., or t.t.l., works lb. .34 : —
tanks, works lb. .32 : —
Dichlorodiphenyltrichloroethane (see DDT).
2,2-Dichloroethyl ether, dms., c.l., t.l., dlvd. E lb. .15½ : —
dms., l.c.l., t.t.l., same basis lb. .17 : —
tanks, same basis lb. .13 : —
Dichloroisocyanuric acid, dms., c.l., t.l., frt. equald lb. .65 : —
dms., l.c.l., same basis lb. .75 : —
Dichloropentanes, dist., dms., c.l., works lb. .05 : —
dms., l.c.l., works lb. .06 : —
tanks works lb. .03 : —
Dichlorophenoxyacetic acid (see 2,4-D).
Dicyclohexylamine, dms. c.l., works. lb. .54 : —
dms., l.c.l., works lb. .55 : —
tanks, works lb. .52 : —
Dicyclohexyl phthalate, gran., fib. dms c.l. works frt alld. lb. .49½ : —
fib. dms., l.c.l., same basis lb. .51½ : —
Dicyclopentadiene, dms. c.l., t.o.b. works lb. .14½ : —
dms., l.c.l., same basis lb. .14¾ : —
tanks, same basis lb. .12 : —
Didecyl phthalate, dms., c.l., works. lb. .28½ : —
dms., l.c.l., same basis lb. .30 : —
tankcars, tanktrucks, 2,000 gals. lb. .26 : —
tanktrucks 1,000-1,999 gals, same basis lb. .26½ : —
Dieldrin, dms., c.l. dlvd. lb. 1.85 : —
dms. l.c.l. dlvd lb. 1.90 : —
Diethanolamine, dms., c.l., dlvd. E. lb. .27 : —
dms., l.c.l., same basis lb. .28½ : —
tanks, same basis lb. .24½ : —
Diethanolamine lauryl sulfate, dms., c.l., frt. alld lb. .27½ : —
dms., l.c.l. frt. alld. lb. .28½ : —
tanks, frt alld lb. .26½ : —
Diethyl barbituric acid (see Barbital).
Diethyl carbonate, dms. c.l., t.o.b. works lb. .47½ : —
dms., l.c.l., same basis lb. .48½ : —
tanks, same basis lb. .45 : —
Diethyl ethanolamines, dms., c.l., dlvd lb. .69½ : —
dms., l.c.l., dlvd. lb. .71 : —
tanks, dlvd lb. .67 : —
Diethyl oxalate, dms. c.l., t.o.b. works lb. .42½ : —
dms., l.c.l., same basis lb. .43½ : —
tanks, same basis lb. .40 : —
Diethyl phthalate, dms., c.l., dlvd. lb. .29¾ : —
dms., l.c.l., dlvd. lb. .31¼ : —
tanktrucks, 1,000-1,999 gals. same basis lb. .27¾ : —
tankcars, tanktrucks, 2,000-lb lots, same basis lb. .27¼ : —
Diethyl sulfate, dms, c.l., frt. alld. E. lb. .21 : —
dms., l.c.l., frt. alld. E lb. .22½ : —
tanks, frt. alld. E lb. .18½ : —
Diethyl thiourea, dms., c.l., t.l., works lb. .58 : —
dms., l.c.l., same basis lb. .59 : —
Diethyl toluamide, 90-95% meta isomer, dms. c.l. t.l., works. lb. 2.30 : —
5-44 dm. lots, works lb 2.35 : —
1-4 dm lots, works lb 2.40 : —
N,N-Diethyl-m-toluidine, tech., tks., tanks, frt alld lb. .83 : —
Diethylamine, dms. c.l., dlvd E lb. .82 : —
dms., l.c.l., same basis lb. .83½ : —
tanks, same basis lb. .49½ : —
N,N-Diethylaniline, dms., c.l., frt. alld lb. .57 : —
dms., l.c.l., same basis lb. .58 : —
tanks, same basis lb. .55 : —
Diethylbenzene, 380 lb. dms., c.l., t.l., frt alld., Zone 1 lb. .17½ : —
f.o.b. Zone 2 lb. .18½ : —
Diethylbenzene, 380-lb. dms., l.c.l., c.l., f.o.b. Zone 1, warehouse points, Zone 2 lb. .19½ : —
Diethylbenzene tankcars, Zone 1 lb. .20¼ : —
Zone 2 lb .15 : —
Zone 1 is East of the Rockies, Zone 2, West of the Rockies lb .16 : —
Di-2-ethylhexyl adipate (see Di-octyl adipate).
Di-2-ethylhexyl phthalate (see Di-octyl phthalate).
Diethylene glycol, dms. c.l., dlvd E. dms., l.c.l., same basis lb. .17¾ : —
tanks, same basis lb. .19¼ : —
Diethylene glycol diethyl ether, dms., c.l., works lb. .15¼ : —
dms., l.c.l., works lb. .55 : —
Diethylene glycol monobutyl ether, c.l., dms., frt. alld. E lb. .55¾ : —
dms., l.c.l., frt. alld. E lb. .30¾ : —
tanks, frt. alld. E lb. .32¼ : —
Diethylene glycol monobutyl ether acetate, dms., c.l., works lb. .28¼ : —
dms., l.c.l., works lb. .30¾ : —
tanks, works lb. .31½ : —
Diethylene glycol monoethyl ether, dms., c.l., dlvd. E lb. .28¾ : —
dms., l.c.l., dlvd. E lb. .22½ : —
tanks dlvd E lb. .24 : —
Diethylene glycol monoethyl ether acetate, dms., c.l., works. lb. .20 : —
dms., l.c.l., works lb. .27¼ : —
tanks, works lb. .28 : —
Diethylene glycol monomethyl ether, dms., c.l., dlvd. E lb. .25¼ : —
dms., l.c.l., dlvd. E lb. .21 : —
tanks, dlvd E lb. .22½ : —
Diethylenetriamine, dms., c.l., dlvd, E lb. .44 : —
tanks, dlvd E lb. .45½ : —
Diethylstilbesterol, USP, bots., 10-bots. 1-kilo lot kilo. 100.00 147.50
kilo lots kilo. 110.00 152.50
Digitalis leaves, USP, dom., dms lb. 1.25 —
Digitoxin, USP, bots gram. 3.75 4.20
Diglycol laurate, dms., ton lots lb. .32½ : —
Diglycol stearate, dms., t.l lb. .26 : —
Digitcolic acid, bgs., c.l., t.l., works. lb. .15½ : —
bgs., l.c.l. works lb. .16 : —
Dihexyl sebacate, dms., c.l., works. lb. .66 : —
dms., l.c.l., works lb. .67 : —
tanks, works lb. .64 : —
Dihydrazine sulfate, dms., works lb. 1.10 : 1.20
Dihydrostreptomycin sulfate, bulk. gram. .08 : —
1,2-Dihydroxy anthraquinone, dms., works lb. 2.45 : —
2,2-Dihydroxy-5-5-dichloro-diphenyl-methane, pure, dms lb. 2.55 : —
Tech., dms., 20,000 lbs. or more lb. 1.11 : —
dms., 1,050 lbs. to 20,000 lbs. lb. 1.13 : —
dms., 150 lbs. to 1,050 lbs. lb. 1.15 : —
Di-isobutyl ketone, dms., c.l., dlvd. dms., l.c.l., dlvd. lb. .17 : —
tanks, dlvd lb. .18½ : —
Di-isobutyl phthalate, dms., c.l., dlvd. E lb. .14½ : —
dms., l.c.l., same basis lb. .31½ : —
tanks, same basis lb. .32½ : —
Di-isobutylene, dms. c.l., dlvd. E lb. .29 : —
dms., l.c.l., dlvd. E lb. .10 : —
tanks, dlvd E lb. .11½ : —
Di-iso-octyl phthalate, dms., c.l., works lb. .08 : —
dms., l.c.l., same basis lb. .29 : —
tanktrucks, 1,000-1,999 gals., works lb. .30½ : —
tankcars, tanktrucks, 2,000 gals., works lb. .27 : —
Di-iso-octyl sebacate, dms., c.l., works lb. .26½ : —
dms., l.c.l., works lb. .62 : —
tanks, works lb. .61¼ : —
Di-isopropanolamine, dms., c.l., dlvd. lb. .60 : —
dms., l.c.l., same basis lb. .23¼ : —
tanks, same basis lb. .24¾ : —
Di-isopropylamine, dms., c.l., dlvd. E. of Rockies lb. .20¾ : —
dms., l.c.l., same basis lb. .50½ : —
tanks, same basis lb. .52 : —
Dillweed oil, dom., bots., dms lb. 5.25 : —
Dimethyl anthranilate, cns. lb. 4.15 : —
Dimethyl dichlorovinyl phosphate, 55-gal. dms., dlvd lb. 3.50 : —
Dimethyl ethanolamine, anhyd., dms., c.l., dlvd. E lb. .78 : —
dms., l.c.l., dlvd. E lb. .79½ : —
tanks, dlvd. E lb. .75½ : —
Dimethyl ethanolamine, 70%, dms., c.l., dlvd., 100% basis, contained amines lb. .78 : —
dms., l.c.l., dlvd. 100% basis. lb. .79½ : —
tanks, dlvd., 100% basis lb. .75½ : —
Dimethyl hydroquinone, dms. lb. 1.90 2.20
Dimethyl phthalate, dms., c.l., works lb. .29¾ : —
dms., l.c.l., works lb. .31¼ : —
tanktrucks, 1,000-1,999 gals., same basis lb. .27¾ : —
tankcars, tanktrucks, 2,000 gals., same basis lb. .27¼ : —
Dimethyl sebacate, dms., c.l., works. lb. 1.31 : —
dms., l.c.l., works lb. 1.30 : —
tanks, works lb. 1.28 : —
Dimethyl sulfate, ret. dms., c.l., works lb. .17½ : —
ret. dms., l.c.l., works lb. .18½ : —
tanks, works lb. .16½ : —
Dimethyl sulfide, dms., c.l., works. lb. .17½ : —
dms., l.c.l., works lb. .18½ : .19¼
tanks, works lb. .15 : —
Dimethyl sulfoxide, dms., c.l., f.o.b. works lb. .35 : —
dms., l.c.l., same basis lb. .37 : .38
tanks, same basis lb. .33 : —
Dimethylamine, 25% soln., dms., c.l., frt. equald, 100% basis lb. .38 : —
dms., l.c.l., frt. equald. 100% basis lb. .38½ : —
tanks, frt equald, 100% basis, 40% soln., dms., c.l., frt. equald., 100% basis lb. .28 : —
dms., l.c.l., frt. equald. 100% basis lb. .35 : —
N,N-Dimethylaniline, dms., c.l., frt. alld lb. .28 : —
dms., l.c.l., same basis lb. .29 : —
tanks, same basis lb. .26 : —
N,N-Dimethylformamide, dms., c.l., t.l., works lb. .32½ : —
dms., l.c.l., works lb. .33 : .34
tanks, works lb. .30 : —
2,4-Dinitroaniline, dms., frt. alld lb. .75 : —
Dinitroaniline orange toner, CP, bbls., dlvd E. of Rockies. lb. 1.61 : —
Dinitroaniline orange toner prices 1c. higher W of Rockies
m-Dinitrobenzene, 89°C., dms. lb. .26 : —
2,4-Dinitrochlorobenzene, crystallizing at 46½°C., dms., c.l., frt. alld. E lb. .17¼ : —
tanks, frt. alld. E. lb. .17¾ : —
2,4-Dinitrophenol, bbls. lb. .17 : —
2,4-Dinitrotoluene, oil, dms. lb. .41 : —
Refd. 63°C. dms. lb. .11 : —
Dioctyl adipate, dms., c.l., works lb. .22¼ : —
dms., l.c.l., works lb. .42½ : —
tanks, works lb. .43½ : —
Dioctyl phthalate, dms., c.l., frt. alld. E lb. .40 : —
dms., l.c.l., frt. alld. E lb. .29 : —
tanktrucks, 1,000-1,999 gals., same basis lb. .30½ : —
tankcars, tanktrucks, 2,000 gals., same basis lb. .27 : —
Dioctyl phthalate prices ¾c. higher in West.
Dioctyl senacate, dms., c.l., works. lb. .61¼ : —
dms., l.c.l., works lb. .62¼ : —
tanks, works, dlvd lb. .62¼ : —
1,4-Dioxane, dms., c.l., frt. alld. E. lb. .59¼ : —
dms., l.c.l., frt. alld. E lb. .31½ : —
tanks, frt. alld. E lb. .33 : —
Prices in the west are 2c. per lb. higher.
Dipentaerythritol, bgs. c.l., t.l., dlvd. E lb. .34 : —
Dipentene, dest.-dist., dms., c.l., works gal. .58 : —
dms., l.c.l., works lb. .62 : —
tankscars, works gal. .78 : —
Steam dist., dms. c.l., works, South gal .41 : —
dms., l.c.l., dlvd. New York gal. .72 : —
tanks, works, South lb. .91 : —
Dip oil (see fat acid oil). lb. .55 : —
Diphenolic acid, 1,000-lb or more, bgs., works lb. .75 : —
Diphenolic polyether acids, 1,000-lb. or more, bgs., works lb. 1.00 : —
Diphenyl, bgs. c.l. t.l., works lb. .16¾ : —
bgs., l.c.l., works lb. .18½ : —
tanks, works lb. .15¾ : —
Diphenyl oxide perfume grade, cns. lb. .55 : .70
Diphenyl phthalate, dms., c.l., works. lb. .52 : —
dms., l.c.l., works lb. .54 : —
Diphenylamine, retd., flake, ngs., c.l., works, frt. equald lb. .32 : —
bgs., l.c.l., same basis lb. .34 : —
Refd., fused tanks, same basis, lb. .29 : —
Refd., diphenylamine in dms., ½c per lb higher
Diphenylguanadine, bgs., dms., ton lots, frt. alld. lb. .51 : —
bgs., smaller lots, frt. alld. lb. .53 : —




**A CHAIN OF CYANAMID EXPERTS.** Each of these men is special in a way that can help you. They are Cyanamid Fine Chemicals Department Representatives—experienced in dealing with the specific needs of drug-cosmetic production for efficient marketing/merchandising. But more than this, they are specialists in helping coordinate your needs with the research and custom synthesis facilities of Cyanamid—the 30,000 skilled workers and the 50 up-to-date factories with a world of experience in solving product difficulties. If you have a problem ranging from solubility to stability, or if your "expanding" needs call for the development of new products and markets, let your Fine Chemicals Department Representative describe how our custom synthesis service can help. Vitamins, sulfonamides, antibiotics, non-inhibitory intrinsic factor concentrate, other bulk pharmaceuticals and cosmetic chemicals. Complete custom synthesis service.

CYANAMID | **AMERICAN CYANAMID COMPANY · FINE CHEMICALS DEPARTMENT / Pearl River, New York.**

## Diphenylhydantoin-Sodium—Ethyl Carbamate

| | | | |
|---|---|---|---|
| Diphenylhydantoin-sodium, USP, dms | lb | 5.00 | 5.60 |
| Dipropylene glycol, dms., c.l., trt. alld | lb. | .17 | — |
| dms., t.c.l., frt. alld. | lb. | .18½ | — |
| tanks, frt alld | lb | 14¼ | — |
| Dipropylene glycol prices 1c. higher in West. | | | |
| Dipropylene glycol methyl ether, dms., c.l., dlvd. E | lb | .20 | — |
| dms., t.c.l., same basis | lb. | .21½ | — |
| tanks, same basis | lb | 18½ | — |
| Dithiodibenzoic acid, dms., 1,000-lb lots, works | lb | 1.80 | — |
| Di-o-tolylguanidine, dms., ton lots, frt. alld | lb. | .71 | — |
| dms., smaller lots, frt. alld | lb. | .72 | — |
| Di-o-tolylthiourea, tech., solid, dms., c.l., t.l., frt. alld | lb. | .59 | — |
| Divinylbenzene, 20-25% dms., c.l., works, frt equald | lb. | .20 | — |
| dms., t.c.l., same basis | lb. | .21 | — |
| tanks, same basis | lb. | .19 | — |
| 80-60%, dms., c.l., works, 100% basis | lb | 1.00 | — |
| dms., t.c.l., works, 100% basis | lb | 1.05 | — |
| tanks, same basis | lb. | .90 | — |
| Dodecenyl succinic anhydride, dms., c.l., t.l., dlvd, E | lb. | .50 | — |
| dms, t.c.l., t.t.l., same basis | lb. | .52 | — |
| Dodecylbenzene, dms., c.l., f.o.b., works, frt equald | lb. | .134 | — |
| dms., t.c.l., same basis | lb. | .144 | — |
| tanks, same basis | lb. | .11 | — |
| Dodecylphenol, c.l., frt. alld | lb. | 22½ | — |
| dms., t.c.l., same basis | lb. | .23½ | — |
| tanks, same basis | lb. | .20 | — |

Dodecylphenol prices on shipments to Western States are 2c. per pound higher.

Dyes, coaltar, certified colors for food, drugs and cosmetics, 500-lb. and 1-lb. lots, dlvd.:

| | | | |
|---|---|---|---|
| Blue, FD&C, No. 1 | lb. | 15.65 | -17.60 |
| No. 2 | lb. | 15.65 | -17.60 |
| Green, FD&C, No. 1 | lb. | 15.65 | -17.60 |
| No. 2 | lb. | 19.60 | -22.85 |
| No. 3 | lb. | 31.30 | -35.90 |
| Red, FD&C, No. 2 | lb. | 3.30 | - 4.10 |
| No. 3 | lb. | 19.60 | -22.85 |
| No. 4 | lb | 5.55 | 7.50 |

Dyes, coaltar, certified colors for drugs and cosmetics 500-lb and 1-lb. lots, dlvd:

| | | | |
|---|---|---|---|
| Yellow, FD&C, No. 5 | lb. | 3.30 | - 4.10 |
| No. 6 | lb. | 3.30 | 4.10 |

Dyes, coaltar, certified colors for drugs and cosmetics, 200-lb. and 1-lb. lots, dlvd.:

| | | | |
|---|---|---|---|
| Black, D&C, No. 1 | lb. | 10.50 | -10.95 |
| Brown, D&C, No. 1 | lb. | 15.65 | -16.10 |
| Green, D&C, No. 5 | lb. | 15.65 | -16.10 |
| No. 6 | lb. | 15.65 | -16.10 |
| No. 7 | lb. | 14.35 | -14.80 |
| Orange, D&C, No. 3 | lb. | 10.50 | -10.95 |
| No. 4 | lb. | 19.60 | -20.05 |
| No. 5 | lb | 3.80 | 4.25 |
| Red, D&C, No. 17 | lb. | 10.50 | -10.95 |
| No. 18 | lb. | 23.60 | -24.00 |
| No. 19 | lb. | 15.00 | -15.45 |
| No. 21 | lb | 3.90 | 4.35 |
| No. 22 | lb. | 10.50 | -10.95 |
| No. 28 | lb. | 24.15 | -24.65 |
| No. 33 | lb. | 17.00 | -17.45 |

Dyes, coaltar, certified colors for drugs and cosmetics, 200-lb. and 1-lb. lots, dlvd.:

| | | | |
|---|---|---|---|
| Violet, D&C, No. 2 | lb. | 15.65 | -16.10 |
| Yellow, D&C, No. 7 | lb. | 10.50 | -10.95 |
| No. 8 | lb. | 10.50 | -10.95 |
| No. 10 | lb. | 13.05 | -13.50 |
| No 11 | lb. | 13.05 | -13.50 |

Dyes, coaltar, certified colors for drugs and cosmetics, external use, 500-lb. and 1-lb. lots, dlvd.:

| | | | |
|---|---|---|---|
| Blue, Ext., D&C, No. 1 | lb. | 15.65 | -16.10 |
| Green, Ext., D&C, No. 1 | lb. | 15.65 | -16.10 |
| Red, Ext., D&C, No. 1 | lb. | 13.05 | -13.50 |
| Yellow, Ext, D&C, No. 1 | lb. | 10.50 | 10.95 |

Dyes, coaltar for general use in cloth dyeing (numbers are those of the Color Index scale or prototype), contract dlvd. No.

| | | | | |
|---|---|---|---|---|
| 11110 | Brilliant scarlet BN | lb. | 1.79 | — |
| 13390 | Fast blue SR | lb. | 1.57 | — |
| 14025 | Yellow 2G | lb. | 1.26 | — |
| 14030 | Orange R, extra, conc. | lb. | 1.64 | — |
| 14645 | Chrome black T | lb. | .77 | — |
| 14720 | Rubine XX, conc | lb. | 1.76 | — |
| 15510 | Orange Y, extra conc. | lb. | .83 | — |
| 15575 | Orange RR | lb. | .99 | — |
| 15620 | Fast Red A, conc. | lb. | 1.77 | — |
| 15705 | Chrome blue black R, conc. | lb. | 1.12 | — |
| 16150 | Scarlet 2RL | lb. | 1.22 | — |
| 16255 | Brilliant scarlet 3RN, conc. | lb. | 1.26 | — |
| 16230 | Fast light, orange 2G | lb. | 1.39 | — |
| 17590 | Brown PG | lb. | 3.00 | — |
| 18050 | Phloxine 2G | lb. | 1.16 | — |
| 18055 | Fuchsine 6B | lb. | 1.55 | — |
| 18965 | Fast yellow 2G | lb. | 2.32 | — |
| 19140 | Yellow XX | lb. | 2.48 | — |
| 19555 | Yellow NN, conc. | lb | 3.67 | — |
| 20170 | Brown Y | lb. | 1.53 | — |
| 20470 | Blue black, extra, conc. | lb | 1.51 | — |
| 21010 | Brown, RX, conc | lb. | 1.42 | — |
| 22240 | Scarlet B | lb. | 2.81 | — |

Dyes, coaltar for general use in cloth dyeing (numbers are those of the Colour Index scale of prototype), contract, dlvd. No.

| | | | | |
|---|---|---|---|---|
| 22310 | Red FC | lb. | 1.57 | — |
| 22311 | Brown MCW | lb. | 1.59 | — |
| 22610 | Blue 2B, extra conc | lb. | 1.51 | — |
| 23500 | Red, 4BX, conc. | lb. | 1.80 | — |
| 24410 | Sky blue FF, extra, conc. | lb. | 1.95 | — |
| 24895 | Brilliant yellow, conc. | lb. | 3.27 | — |
| 26360 | Navy blue 3R, conc. | lb. | 1.84 | — |
| 26695 | Black F, conc. | lb. | 2.30 | — |
| 26900 | Milling Red 3R, conc | lb. | 2.24 | — |
| 27075 | Neutral black 2B, conc | lb. | 2.75 | — |
| 27720 | Gray L | lb. | 2.18 | — |
| 29185 | Fast scarlet 4BNC | lb. | 2.23 | — |
| 30015 | Diazo black VJ conc. | lb. | 2.48 | — |
| 30045 | Yellow brown K, extra | lb. | 1.45 | — |
| 30235 | Black EB, 200% | lb. | 1.33 | — |
| 30295 | Green BY, conc. | lb. | 1.07 | — |
| 35660 | Brown B | lb. | 2.89 | — |
| 37565 | Naphthol SWF | lb. | 1.85 | — |
| 40000 | Yellow 2G | lb. | 1.44 | — |
| 41000 | Yellow OX | lb. | 2.45 | — |
| 42000 | Green V, crystals | lb. | 2.73 | — |
| 42040 | Brilliant green G crystals | lb. | 3.62 | — |
| 42090 | Blue EG | lb. | 1.85 | — |
| 42100 | Milling green 6B, conc. | lb. | 4.78 | — |
| 42640 | Violet 4BXN | lb. | 2.43 | — |
| 42830 | Brilliant blue, BBG | lb. | 2.44 | — |
| 44045 | Blue B, extra conc. | lb. | 3.61 | — |
| 45170 | Red BX | lb. | 4.76 | — |
| 50415 | Nigrosine SSJ | lb. | 1.03 | — |
| 52015 | Blue GXX | lb. | 2.54 | — |
| 58005 | Alizarin red SC | lb. | 3.64 | — |
| 59700 | Golden orange GFD, single paste | lb. | 2.70 | — |
| 59710 | Flaming orange 6RD double powder | lb. | 4.90 | — |
| 59800 | Dark blue BO, single paste. | lb. | 2.28 | — |
| 59825 | Jade green NC supra, double paste | lb. | 1.75 | — |
| 61570 | Alizarin green CG, extra | lb. | 3.81 | — |
| 63010 | Alizarin blue SAPG | lb | 3.90 | — |
| 63615 | Alizarin blue black B | lb | 3.26 | — |
| 69825 | Blue BLFD double paste | lb. | 2.76 | — |
| 70800 | Brown BR single paste | lb | 2.03 | — |

Dyes, coaltar oil-soluble, 100-lb. drums, dlvd. No

| | | | | |
|---|---|---|---|---|
| 12140 | Oil scarlet BL | lb | 1.87 | — |
| 12055 | Oil orange 7078 V | lb | 1.38 | — |
| 26120 | Oil red N 1700 | lb | 1.94 | — |
| 42535B | Methyl violet base | lb | 1.88 | — |
| 44045B | Victoria blue base | lb | 4.06 | — |
| 50415B | Oil black BBN3 | lb. | .80 | — |
| 61565 | Alizarin cyanine green base. | lb. | 6.13 | — |

Dyes, coaltar, spirit soluble, 100 lb. dms., dlvd., Black RB

| | | | |
|---|---|---|---|
| | lb. | 3.89 | — |
| Spirit brown GN | lb. | 5.30 | — |
| Spirit orange R conc. | lb. | 5.87 | — |
| Spirit red B conc. | lb. | 6.41 | — |
| Pr 517 Spirit yellow 2R conc | lb | 4.62 | — |
| Pr 554 Spirit blue THN | lb | 5.06 | — |

## E

| | | | |
|---|---|---|---|
| Echinacea root, bls. | lb | 1.25 | — |
| Elm bark, grinding, bls. | lb | .30 | .32 |
| Powd., bbls., ¼s | lb. | .60 | — |
| Select, bundles | lb | .75 | — |
| Emetine hydrochloride, USP bots. | oz. | 48.40 | — |
| Endrin, tech., dms., 100-lbs or more, 100% basis, dlvd | lb. | 2.77 | — |
| Eosin red toner, bbls, works | lb. | 1.95 | — |
| Ephedrine syn., USP, anhyd., bots. 100-oz lots | oz. | .98 | 1.00 |
| hydrous, bots, 100-oz lots, | oz. | .92 | — |
| Ephedrine hydrochloride NF, dms., 100-oz., f.o.b. works | oz. | .75 | — |
| Ephedrine sulfate USP, cryst., dms., 100-oz f.o.b works | oz. | .73 | — |
| USP, powd., dms., 100-oz., same basis | oz. | .73 | — |
| Epichlorohydrin, dms., c.l., dlvd | lb. | .29½ | — |
| dms., t.c.l., dlvd. | lb. | .31 | — |
| tanks, dlvd. | lb. | .27 | — |
| l-Epinephrine base, syn, USP bots., 100 gram lots | gram | .58 | — |
| Epsom salt (see Magnesium sulfate) | | | |
| Erigeron oil, cns | lb. | 11.00 | — |
| Ergot, NF, dms., tin-lined | lb. | 2.00 | 2.50 |
| Eserine salicylate, bots | oz. | 34.50 | -40.00 |
| Eserine sulfate, bots | oz. | 86.00 | — |
| Ester gum, gum-rosin type, dms., c.l. dlvd. Ill., Md. Ky., E. States, Minneapolis, N. C., Ohio, St. Louis, St. Paul, Va., W. Va | lb. | .18½ | — |
| Wood-rosin type, dms. c.l., same basis | lb | .18½ | — |
| Ether (see specific product) | | | |
| Ethyl acetate, nat., ferment, 85-88%, dms. c.l. dlvd | lb. | .15 | — |
| dms., t.c.l., dlvd | lb. | .16½ | — |
| tanks dlvd | lb. | .12½ | — |
| 95-98% dms. c.l., dlvd. | lb. | .15¼ | — |
| dms. t.c.l., dlvd | lb | .16¾ | — |
| tanks dlvd | lb | .12¾ | — |
| 99%, dms., c.l., dlvd | lb. | .15½ | — |
| dms. t.c.l. dlvd | lb | .17 | — |
| tanks, dlvd | lb | .13 | — |
| syn., 95-88%, dms., c.l., dlvd | lb. | .15 | — |
| dms. t.c.l., dlvd | lb | .16½ | — |
| tanks, dlvd. | lb. | .12½ | — |
| Ethyl acetate syn. 95-98%, dms., c.l., dlvd | lb. | .15¼ | — |
| dms., t.c.l., dlvd | lb. | .16¾ | — |
| tanks, dlvd | lb. | .12¾ | — |
| 99%, dms. c.l. dlvd. | lb. | .15½ | — |
| dms., t.c.l., dlvd. | lb. | .17 | — |
| tanks dlvd. | lb. | .13 | — |
| Ethyl acetoacetate, dms., c.l., dlvd. | lb. | 58½ | — |
| dms., t.c.l., dlvd. | lb. | .60 | — |
| tanks, dlvd | lb. | .56 | — |
| Ethyl acrylate, dms., c.l., t.l., dlvd. | lb. | .34¾ | — |
| dms., t.t.l., dlvd | lb. | .35¾ | — |
| tanks, dlvd. | lb. | .32¼ | — |
| Ethyl alcohol, 190 pf., USP, tax paid dms. c.l., dlvd E of Rockies | gal. | 20.63 | — |
| dms. t.c.l. same basis | gal. | 20 73 | -20.84 |
| USP, tax-free, dms., c.l., dlvd. E. of Rockies | gal. | .68 | — |
| dms., t.c.l., same basis | gal. | .78 | .89 |
| tanks, same basis | gal | .52 | — |
| Ethyl alcohol, absolute 200 pf., tax paid, dms. dlvd E. of Rockies | gal. | 21 75 | — |
| dms., t.c.l., same basis | gal. | 21.85 | -21.96 |
| tanks, same basis | gal. | 21.59 | — |
| Ethyl alcohol, denatured (see Denatured alcohol ethyl) | | | |
| Ethyl aminobenzoate USP (see Benzocaine). | | | |
| Ethyl amyl ketone dms. c.l., dlvd. | lb | .20 | — |
| dms. t.c.l. same basis | lb. | .21½ | — |
| tanks, same basis | lb | 17½ | — |
| Ethyl benzoate bots. | lb. | .75 | 1.00 |
| Ethyl bromide tech., 98%, dms., c.l., frt. alld. E | lb | 43 | — |
| dms. t.c.l., frt alld E | lb. | 45 | — |
| tanks, frt. alld. E | lb. | .40 | — |
| 2-Ethyl butyl alcohol, dms., c.l., works | lb. | .30 | — |
| dms., t.c.l., works | lb. | .30¾ | — |
| tanks, works | lb. | .28 | — |
| Ethyl butyl ketone, dms., c.l., t.l., works | lb. | .36 | — |
| dms t.c.l., t.l. works | lb. | .36¾ | — |
| tanks works | lb. | .34 | — |
| Ethyl butyrate dms. works | lb. | .85 | 1.00 |
| Ethyl carbamate (see Urethane). | | | |


## HARDWORKING JEFFERSON CHEMICALS

# ETHYLENE GLYCOLS

MONO-
DI-
TRI-
TETRA-

### SPECIFICATIONS

| GLYCOLS: | ETHYLENE | DIETHYLENE | TRIETHYLENE |
|---|---|---|---|
| Water, wt.% | 0.30 max. | 0.20 max. | 0.10 max. |
| Acidity as acetic, wt.% | 0.005 max. | 0.005 max. | 0.01 max. |
| Ash, wt.% | 0.005 max. | 0.005 max. | 0.01 max. |
| Boiling range, ASTM, °C. | | | |
| IBP: | 195 min. | 242 min. | 278 min. |
| DP: | 207 max. | 250 max. | 300 max. |
| Specific gravity, 15.6/15.6°C. | 1.1174 min. | 1.1190 min. | — |
| | 1.1179 max. | 1.1220 max. | — |
| Specific gravity, 20/20°C. | — | — | 1.124 min. |
| | — | — | 1.126 max. |
| Color, Pt-Co scale | 15 max. | 15 max. | 25 max. |

### SELECT PROPERTIES

| | | | |
|---|---|---|---|
| Boiling point, 760 mm., °C. | 197.2 | 244.8 | 287.4 |
| Flash point (open cup), °F. | 240 | 290 | 330 |
| Specific heat, cal./gm./°C. | 0.544 | 0.551 | 0.525 |
| Viscosity, 25°C., centipoise | 17.4 | — | — |
| Viscosity, 20°C., centipoise | — | 35.7 | 47.8 |
| Weight, 20° C., lbs./gal. | 9.28 | 9.31 | 9.36 |

### SHIPPING AND HANDLING

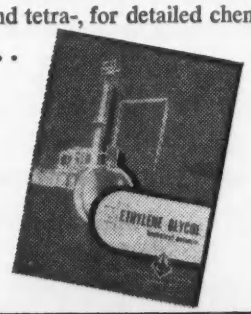
Ethylene glycols are available from Jefferson in 4,000-, 6,000-, 8,000- and 10,000-gal. tank cars, tank wagons in most areas, and 55-gal. resin-lined drums.

The handling and storage of these glycols is in most cases a straightforward operation. They present no hazard of explosion, polymerization, fire, health, or other industrial risk. They are hygroscopic and have relatively low vapor pressures. There are, however, certain uses requiring extra protection against contamination during handling and storage . . . explained in detail in our technical literature.

### TECHNICAL INFORMATION

Request this Technical Brochure on Ethylene Glycol, mono-, di-, tri- and tetra-, for detailed chemical and physical data . . .

Jefferson Chemical Company, Inc., 1121 Walker Avenue, P. O. Box 303, Houston 1, Texas.




HOUSTON • NEW YORK • CHICAGO • CLEVELAND
CHARLOTTE • LOS ANGELES • SAN FRANCISCO

JEFFERSON CHEMICALS

118

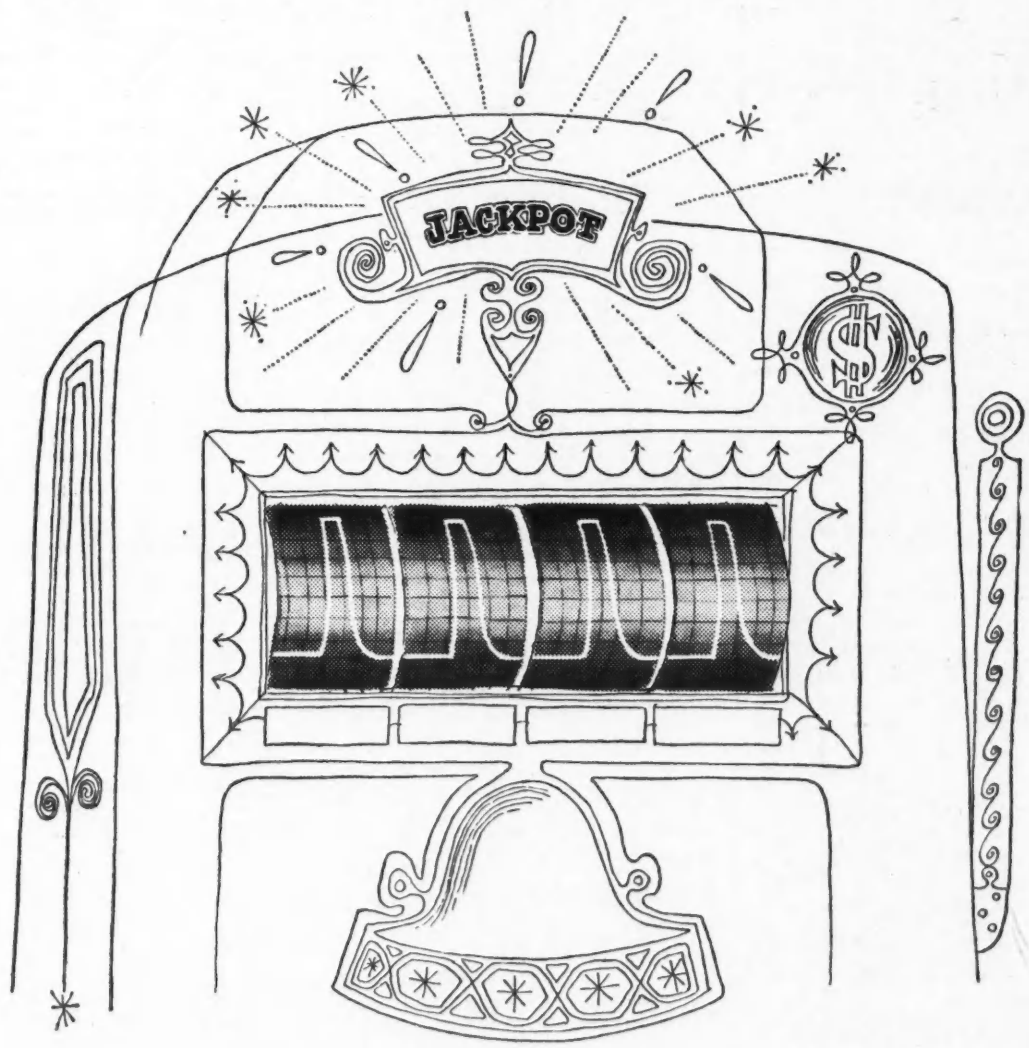
| | | | |
|---|---|---|---|
| Ethyl cellulose, vis. 7 cps., bgs., 5,000 lb lots or more, frt. alld. E | lb. | .73 | — |
| bgs. smaller lots frt alld E | lb. | .75 | — |
| vis. 10, 20, 30, 100, 150 cps., bgs., 5,000-lb. lots or more, frt. alld. E | lb. | .68 | — |
| bgs., smaller lots, frt alld E | lb. | .70 | — |
| Ethyl chloride tech., cyls., works | lb | .20 | .22 |
| dms., works | lb | .18 | .20 |
| tanks, works | lb | .10 | — |
| Ethyl cinnamate, cns | lb. | 3.25 | - 3.50 |
| Ethyl ethanolamines, mixed, dms., c.l., divd E | lb. | .43½ | — |
| dms., t.c.l., divd E | lb. | .44½ | — |
| tanks, divd E | lb. | .41½ | — |
| Ethyl ether, absolute ACS, dms | lb | .27 | — |
| Anesthesia USP dealers, 1-lb. cns | lb. | 1.01 | — |
| ½ lb cns | lb | 1.09 | — |
| ¼-lb cns | lb | 1.21 | — |
| Indust. dms. c.l. divd. | lb | .13½ | — |
| dms., t.c.l., divd E | lb | .15 | — |
| tanks divd E | lb | .11 | — |
| 2-Ethyl hexoic acid dms., c.l., t.l., divd E | lb | .37 | — |
| dms. t.c.l., t.t.l. divd E | lb. | .38½ | — |
| tanks divd E | lb. | .34½ | — |
| 2-Ethyl hexoic acid 1c. higher W. of Rockies. | | | |
| 2-Ethylhexyl acrylate, dms., c.l., t.l., straight or mixed frt. alld. E | lb. | .39½ | — |
| dms., t.t.l., same basis | lb. | .40½ | — |
| tanks, same basis | lb. | .37 | — |
| 2-Ethylhexyl alcohol, dms., c.l., divd. E | lb. | .23¾ | — |
| dms., t.c.l., divd. E | lb. | .25¼ | — |
| tanks, divd. E | lb. | .21¼ | — |
| Ethyl iodide chys. works | lb. | 3.30 | |
| Ethyl methacrylate dms. c.l., frt. equald | lb | .52 | — |
| dms. t.t.l. frt equald | lb | .52½ | — |
| tanks, frt equald | lb | .50 | — |
| Ethyl morphine hydrochloride, USP bots | oz. | 11.85 | — |
| Ethyl oenanthate dms | lb | 1.05 | 1.30 |
| Ethyl oxalate (see Diethyl oxalate). | | | |
| Ethyl silicate dist (see Tetraethyl orthosilicate). | | | |
| Ethyl silicate 40% available SiO, dms., c.l., divd. E | lb. | .49 | — |
| dms., t.c.l., divd. E | lb. | .50½ | — |
| tanks, divd. E | lb. | .47 | — |
| N-Ethyl-a-naphthylamine dms. works. | lb | 1.04 | — |
| N-Ethyl-m-toluidine tech., liq., tanks frt. alld | lb | .83 | — |
| N-Ethyl-o-toluidine, bbls | lb. | .88 | — |
| Ethylamine (see Mono- Di-, or Tri-) | | | |
| N-Ethylaniline dms. c.l. frt. alld. | lb. | .57 | — |
| dms. t.c.l., frt. alld | lb. | .58 | — |
| tanks frt. alld | lb. | .55 | — |
| Ethylbenzene 99% dms. c.l., t.l., frt. equald | lb. | .14 | — |
| dms., t.c.l., same basis | lb. | .16 | — |
| tanks, same basis | lb. | .11½ | — |
| Ethylene, contract refy gate | lb | .04½ | .052 |
| Ethylene dibromide dms. c.l., frt. equald | lb. | .30½ | — |
| dms., t.c.l. frt equald | lb. | .31½ | — |
| tanks, frt equald | lb. | .28½ | — |
| Ethylene dichloride dms. c.l. divd. | lb | .11½ | — |
| dms., t.c.l., same basis | lb. | .13 | — |
| tanks, same basis | lb | .09 | — |
| Ethylene dichloride prices W. of Rockies, 1c per lb higher | | | |
| Ethylene glycol indust dms., c.l., divd E | lb. | .16 | — |
| dms., t.c.l., same basis | lb. | .17½ | — |
| tanks, same basis | lb. | .13½ | — |
| Ethylene glycol monobutyl ether, dms. c.l., divd E | lb. | .22 | — |
| dms. t.c.l., divd E | lb. | .23½ | — |
| tanks, divd E | lb. | .19½ | — |
| Ethylene glycol monoethyl ether, dms. c.l. divd. E | lb. | .21 | — |
| dms., t.c.l., divd E | lb. | .22½ | — |
| tanks, divd E | lb. | .18½ | — |
| Ethylene glycol monoethyl ether acetate dms. c.l. divd. E | lb. | .19½ | — |
| dms., t.c.l., divd. E | lb. | .21 | — |
| tanks, divd E | lb. | .17 | — |
| Ethylene glycol monomethyl ether, dms. c.l., divd. E | lb. | .21 | — |
| dms., t.c.l., divd E | lb. | .22½ | — |
| tanks, divd E | lb. | .18½ | — |
| Ethylene glycol monomethyl ether acetate, dms., c.l., works | lb. | .29 | — |
| | lb. | .29 | — |
| dms., t.c.l., works | lb. | .29¾ | — |
| tanks, works | lb. | .27 | — |
| Ethylene glycol monostearate, flake, 150-lb. ctn | lb. | .33 | — |
| Ethylene oxide dms. c.l. divd E. | lb. | .21½ | — |
| dms., t.c.l., divd E | lb. | .24½ | — |
| tanks divd E | lb. | .15½ | — |
| Ethylene trichloride (see Trichloroethylene) | | | |
| Ethylenediamine 85-88%, dms., c.l., divd E., 100% basis | lb. | .42 | — |
| dms t.c.l. divd E. 100% basis. | lb. | .43 | — |
| tanks divd E., 100% basis | lb. | .40 | — |
| Ethylvanillin, 100-lb. fib. dms., 500-lb. | lb. | 6.75 | — |
| less than 500-lb. | lb. | 7.40 | — |
| Eucalyptol USP cns. dms | lb | .85 | 1.40 |
| Eucalyptus oil NF rectified, 70-75% dms | lb. | .45 | — |
| NF rectified, 80-85% dms | lb | .53 | .62 |
| Eugenol, tech., dms | lb. | 0.00 | — |
| USP, dms. | lb. | 1.90 | — |
| Euphorbia herb, bls | lb. | .13 | .15 |

## F

| | | | |
|---|---|---|---|
| F salt paste, tech., dms., works | lb. | 2.50 | — |
| Fennel oil, sweet, USP, cns. | lb. | 2.60 | — |
| Fennel seed Argentine, ogs. | lb | .16 | — |
| French, light, bgs | lb. | .16 | — |
| Indian, light, bgs | lb. | .17½ | — |
| Rumanian bgs | lb. | .14 | — |
| Yugoslav light bgs | lb. | .16½ | — |
| Fenugreek seed, Moroccan, bgs | lb. | .09 | — |
| Ferric chloride, anhyd., tech., 350-lb. dms., c.l., works 100 lbs. | | 8.00 | — |
| dms., l.c.l., works 100 lbs. | | 9.00 | — |
| Indust., cryst., bbls., c.l., works. 100 lbs. | | 5.25 | - 6.75 |
| bbls. t.c.l. works 100 lbs | | 5.75 | 7.25 |
| 42° Be. photo grade, cbys., c.l., works 100 lbs. | | 7.25 | 8.25 |
| sewage grade, tanks, frt equald. 100% basis 100 lbs. | | 4.00 | — |
| USP cryst. dms t.l. works | lb. | .08½ | — |
| Ferric citrate, gran., dms. | lb. | .86 | — |
| Ferric hypophosphite, NF, 175-lb. dm | lb. | 4.25 | — |
| Ferric naphthenate, liq., 6% Fe. dms. frt alld | lb. | .28¼ | — |
| Ferric oxalate, tech., gran. 50-lb. dm. f.o.b works E | lb | .89 | — |
| Ferric oxides (see Iron oxides) | | | |
| Ferric phosphate NF, soluble, gran pearls, cs | lb. | .72 | .78 |
| Ferric pyrophosphate, NF VII soluble, gran. pearls, 225-lb. dm. | lb. | .79 | — |
| Ferric resinate, dms. ton lots, frt. alld | lb. | .45 | — |
| Ferric stearate dms. c.l. frt alld. | lb | .39 | — |
| dms. t.c.l., frt alld | lb | .40 | .44 |
| Ferric sulfate partly hydrated, bgs. c.l., works | ton. | 35.25 | — |
| bgs., t.c.l. works | ton. | 36.25 | -42.25 |
| bulk, c.l., works | ton. | 33.25 | — |
| Ferric-ammonium citrate, NF, brown, gran., 100-lb. dms | lb. | .68 | — |
| NF, green, gran., 100-lb. dms., frt. equald | lb. | .68 | — |
| Ferric-ammonium oxalate, fine gran., dms | lb. | .27½- | .29½ |
| Ferric-potassium oxalate, fine gran., dms | lb. | .32½- | .34½ |
| Ferric-sodium oxalate, fine gran., dms | lb. | .27½- | .29½ |
| Ferrous gluconate, USP, 200-lb. dm., frt. equald | lb. | .96 | — |
| Ferrous sulfate, gran., bgs., c.l., works | ton. | 34.50 | — |
| bgs., t.c.l., divd. Metropolitan area 100 lbs | | 3.35 | 4.25 |
| bbls., c.l., works | ton. | 40.00 | — |
| bulk, c.l., works | ton. | 27.00 | — |
| USP, cryst., bbls., dms | lb | .09½ | .10 |
| Fir balsam, Canada, bbls | gal | 34.00 | -35.00 |
| Oregon, bbls | gal | 3.40 | 4.64 |
| Fir oil, Canada, cns | lb. | 1.70 | 1.75 |
| Fish oil, refd., alkali, dms | lb. | .1330- | .1380 |
| Kettle-bodied, dms. | lb. | .1560- | .1610 |
| Light-pressed, dms. | lb. | .1180- | .1230 |
| tanks | lb. | .1030- | — |
| Fishliver oil, nat., high potency, 100,000 to 1,500,000 A units per gram, dms 1,000,000 units. | | .12 | — |
| Fishmeal, dom., menhaden 60% protein, grd., bgs., Atlantic and Gulf coasts | ton. | 105.00 | — |
| Fishscrap, dom., menhaden, dried, 60% protein, grd. bgs., Atlantic and Gulf coasts. | ton. | 101.00 | — |
| Fleaseed (see Psyllium seed) | | | |
| Folic acid, USP, bots, fib dms. kilo lots or more gram. | | .23 | — |
| 10% feed grade, fib dms. 3 kilos or more | kilo. | 30.00 | -44.00 |
| Formaldehyde, 37% (inhibited, 12 to 15% methanol), USP, dms., c.l. divd | lb. | .0695 | — |
| tanks, divd. | lb. | .0405 | — |
| Formaldehyde, methanol-free (uninhibited), tanks, divd | lb. | .0375 | — |
| Formic acid 85% cbys. c.l., works. | lb. | .1570- | — |
| cbys., t.c.l., works | lb. | .1620- | .1720 |
| 90% cbys., c.l., works | lb. | .1625- | — |
| cbys., t.c.l., works | lb. | .1675- | .1775 |
| Fringetree bark, bls | lb. | .65 | .70 |
| Fumaric acid tech., 250-lb dms., c.l., frt. equald | lb. | .23¼ | — |
| dms., t.c.l., frt equald | lb. | .24¼ | — |
| Fumaric acid in bags ½c. per lb less | | | |
| Furfural dms. c.l. works | lb. | .13 | — |
| dms. t.c.l. works | lb. | .14 | — |
| tanks, divd E | lb. | .11½ | — |
| tanks, divd W | lb. | .12½ | — |
| Furfuryl alcohol, cns., works | lb | .28 | — |
| dms., c.l., t.l., Newark, N. J | lb. | .19½ | — |
| dms., l.c.l., t.l.l., Newark, N. J | lb. | .20½ | — |
| dms., c.l., t.l., Memphis, Tenn | lb. | .18 | — |
| dms., l.c.l., t.l.l., Memphis, Tenn. | lb. | .19 | — |
| tanks, divd. E. of Denver | lb. | .175 | — |
| Fusel oil refd dms. c.l., divd | lb | .18 | — |
| dms., l.c.l., divd. | lb. | .19½ | — |
| tanks divd | lb. | .15½ | — |

## G

| | | | |
|---|---|---|---|
| G salt bbls. frt alld. 100% basis | lb | .73 | — |
| Gallic acid NF VII bbls. 1,000-lb lots | lb | 2.00 | — |
| bbls. smaller lots | lb | 2.02 | 2.22 |
| Gallic acid, tech., bbls., 1,000-lb. lots | lb. | 1.78 | — |
| bbls. smaller lots | lb | 1.80 | 2.00 |
| Gamma acid dry grd., bbls., frt. alld | lb | 1.75 | — |
| Gammapicoline (see g-picoline) | | | |
| Garlic oil dom. bots | oz | 4.75 | 5.00 |
| Imp. bots | oz. | 4.50 | 5.00 |
| Gaultheria oil (see Wintergreen oil) | | | |
| Gelatin edible 75 AOAC test bbls., c.l. divd | lb | .55 | — |
| 150 AOAC test bbls. c.l. divd | lb | .64 | — |
| 200 AOAC test bbls. c.l. divd | lb | .70 | — |
| 225 AOAC test bbls. c.l. divd | lb | .74 | — |
| 275 AOAC test bbls. c.l. divd | lb | .82 | — |
| Gelsemium root, bls. | lb | .30 | .35 |
| Gentian root bls | lb | .24 | — |
| Grd. bbls. bxs | lb | .30 | — |
| Pwd bbls bxs | lb | .30 | — |
| Geraniol extra cns dms. | lb | 1.75 | 2.40 |
| Soap grade dms | lb | .90 | 1.75 |
| Standard cns. dms | lb | 1.65 | — |
| Synthetic dms | lb | 1.30 | — |
| Geranium oil, Algerian, cns | lb. | 19.00 | -22.00 |
| Bourbon, cns. | lb. | 20.00 | -22.00 |
| Turkish (see Palmarosa oil). | | | |
| Geranyl acetate cns | lb | 1.90 | 2.70 |
| Synthetic dms | lb | 1.45 | — |
| Ginger oil dist. bots | lb | 11.50 | 14.00 |
| Ginger oleoresin NF from African root, bots | lb | 4.25 | 5.00 |
| NF from Jamaican root, bots | lb | 7.75 | — |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Celanese CHEMICALS

Ginger root, Cochin, bgs lb .19½- —
Jamaican, No. 3, bgs lb .28 - —
Nigerian, split, bgs lb .20 - —
Sierra Leone, bgs lb .35 - —
Glauber's salt (see Sodium sulfate).
Gluconic acid tech. 50% dms., c.l., t.l., f.o.b. works lb .20 - —
dms., l.c.l., f.o.b. works lb .21 - —
tanks, f.o.b works lb .17 - —
Glue, bone extracted, dry bone, 86 jellygrams, bgs., c.l., dlvd lb .16 - —
131 jellygrams, bgs., c.l., same basis lb .16½- —
164 jellygrams, bgs., c.l., same basis lb .18½- —
Glue, bone, extracted, dry bone, 191 jellygrams, bgs., c.l., same basis lb .19½- —
222 jellygrams, bgs., c.l., same basis lb .21 - —
Glue, bone, green, 40 jellygrams, bgs., c.l., same basis lb .16 - —
86 jellygrams, bgs., c.l., same basis lb .16 - —
115 jellygrams, bgs., c.l., same basis lb .16½- —
Glue, bone, green, 135 jellygrams, bgs., c.l., same basis lb .17½- —
164 jellygrams, bgs., c.l., same basis lb .18½- —
180 jellygrams, bgs., c.l., same basis lb .19½- —
200 jellygrams, bgs., c.l., same basis lb .20½- —
Bone glue, l.c.l., prices 2c higher.
Glue, hide, 70-94 jellygrams, bgs., c.l., dlvd lb .18 - —
95-149, bgs., c.l., dlvd lb .19 - —
122-149, bgs., c.l., dlvd lb .20½- —
150-177 bgs., c.l., dlvd lb .22½- —
178-206 bgs., c.l., dlvd lb .25 - —
Glue, hide, 207-236, bgs., c.l., dlvd lb .28 - —
237-266, bgs., c.l., dlvd lb .30½- —
267-298, bgs., c.l., dlvd lb .32½- —
299-330, bgs., c.l., dlvd lb .34½- —
331-362, bgs., c.l., dlvd lb .36½- —
363-394 bgs., c.l., dlvd lb .38 - —
Glue, hide, 395-427, bgs., c.l., dvld. lb .40 - —
428-460, bgs., c.l., dlvd lb .42 - —
461-494, bgs., c.l., dlvd lb .44 - —
495-529, bgs., c.l., dlvd lb .46 - —
Hide glue, l.c.l. prices 2c. higher.
l-Glutamic acid, 99½%, fib. dms., 100-lb. lots, frt. alld lb 1.80 - —
fib. dms., 25-lb. lots, frt. alld. lb 1.88 - —
l-Glutamine, bots., 1-9 kilo lots, kilo 150.00 - 300.00
Bots., 50-kilo lots kilo 100.00 - —
Bots. 500-kilo lots kilo 75.00 - —
Glycerine, dom., nat., crude, saponification 88%, tanks, dlvd. lb .15 - —
nat., crude, soapiye, 80% tanks, dlvd lb .14 - —
nat., refd., USP, CP, 99%, dms., c.l., dlvd lb .28½- —
dms., l.c.l., dlvd lb .29¾- —
tanks, dlvd. lb .27½- —
Glycerine, dom., nat., refd., USP, CP, 96%, dms., c.l., dlvd lb .28 - —
dms., l.c.l., dlvd lb .28¾- —
tanks, dlvd. lb .26¼- —
nat., high gravity, dms., c.l., dlvd lb .28¾- —
dms., l.c.l., dlvd lb .29½- —
tanks, dlvd. lb .27 - —
Glycerine, dom., syn., dms., c.l., dlvd lb .29 - —
dms., l.c.l., dlvd lb .29¾- —
tanks, dlvd. lb .27¼- —
Imp., nat., crude, soapiye, 80%, c.i.f lb .14 - —
Glycine (see Aminoacetic acid).
Glycerol (see Glycerine).
Glycolic acid (see Hydroxyacetic acid).
Graphite, 95-97%, powd., bgs., fib. dms., ex whse lb .29 - .31½
Graphite, flake, No. 1, 90-95%, bgs., fib. dms., ex whse lb .29 - .31
No. 2, 90-95%, bgs., fib. dms., ex whse lb .29 - .31
Glycolonitrile, 70%, aqueous, dms., c.l., t.l., works lb .40 - —
dms., l.c.l., same basis lb .42 - —
tanks, same basis lb .39 - —
Glyoxal, 30%, dms., c.l., works lb .20½- —
dms., l.c.l., works lb .21¼- —
tanks, works lb .18 - —
Golden seal root, NF, tested, bls. lb 2.90 - 3.00
Gramicidin, 1 to 5 kilos, f.o.b. works, gram 4.25 - —
Grapefruit oil, dms lb 2.75 - 2.90
Graphite, amorp., powd., bgs., fib. dms., ex whse lb .08 - .09½
Cryst., 88-90% powd., bgs., fib. dms., ex whse lb .19 - .21½
90-92%, powd., bgs., fib. dms., ex whse lb .21 - .24½
Grease, white, choice all hog, tanks, dlvd lb .09¾- .09⅞
Yellow, tanks, dlvd lb .07⅞- .08
Grease oil, No. 1, dms., c.l., f.o.b. Chicago lb .12½- —
dms., l.c.l., same basis lb .14½- —
tankcars, same basis lb .11 - —
Extra winter, strained, dms., c.l., Chicago lb .15½- —
dms., l.c.l., same basis lb .17½- —
tankcars, same basis lb .14 - —
Grease oil, prime, burning, dms., c.l., same basis, Chicago lb .17½- —
dms., l.c.l., same basis lb .19½- —
tankcars, same basis lb .16 - —
Other areas ¾c. higher, except Texas and West Coast, 1¼c. higher.

**GREEN PIGMENTS**

**Green pigment quotations are listed individually. For example, prices on Green, chrome, may be found in the C's under Chrome green**

Grindelia robusta herb, bls lb .40 —
Guaiacol NF cryst. dms., tins lb 2.10 - 2.15
liq., cbys., dms lb 2.30 - 2.40
Guaiacwood oil cns lb .65 .80
Guaiacol carbonate NF VII, dms lb 3.40 3.45
Guar gum, edible, bgs., c.l., f.o.b. shipt. pt lb .38 - —
bgs., l.c.l. same basis lb .40 - .42
Indust., bgs., c.l., same basis lb .32 - —
Tech., bgs., c.l., same basis lb .30 - —

**GUMS**

**Gum quotations are listed individually. For example, prices on Gum, Dammar, may be found in the D's under Dammar gum.**

## H

H acid, dry, bbls, c.l., frt. alld., 100% basis lb 1.00 —
bbls., l.c.l., same basis lb 1.05 —
Hansa yellow 10 G, bbls., dlvd. E. of Rockies lb 2.45 —
Hansa G yellow, pigment, bbls lb 2.20 - —
Hawthorn berries, bgs lb .18 - .20
Heliotropin, 100-lb lots, dms lb 2.60 3.40
Hellebore root dom., green, bls lb .70 - .75
Helonias root, bls lb 1.50 - —
Hemlock oil, cns lb 2.55 3.00
Henbane leaves, bls lb .40 - .45
Heptachlor dms. c.l., t.l., frt. alld., 100% basis lb .96 - —
Heptane, indust., tankcars, New Jersey and New York gal .20 - —
Houston, Texas gal .1625- —
Hesperidin, purif., 50 kilos, f.o.b. works kilo 19.70 - —
Hesperidin methylchalcone, 50 kilos, f.o.b. works kilo 49.25 - —
Hexachlorophene, dms., 1,100 lbs or more lb 1.84 - —
dms. to 1,100 lbs. lb 1.94 - —
Hexalin (see Cyclohexanol).
Hexamethylenetetramine, tech., bgs., 20,000-lb lots or more, Perth Amboy or New York City lb .233 - —
bgs., 1,000-19,999-lb. lots, same basis lb .243 - —
bgs., smaller lots, same basis lb .253 - —
fib dms., 1,000-lb. lots or more, same basis lb .250 - —
fib dms. smaller lots, same basis lb .253 - —
USP, bgs., 500 lbs. or more, f.o.b. Fords, N. J., dlvd New York City and Philadelphia lb .42½- —
bgs., smaller lots, same basis lb .43½- .48½
Hexane, industrial, tankcars, New Jersey and New York gal .20 - —
Houston Texas gal .16 - —
l-Hexanol, dms., c.l., works lb .35 - —
dms., l.c.l., works lb .35¾- —
tanks, works lb .33 - —
Hexyl cinnamic aldehyde, dms lb 3.95 - 4.00
n-Hexyl methacrylate, dms., c.l., works lb .75½- —
dms., l.c.l., works lb .76 - —
Hexyl salicylate, dms lb 1.70 - 1.75
Hexylene glycol, dms., c.l., dlvd lb .17½- —
dms., l.c.l., dlvd. lb .19 - —
tanks, dlvd lb .15 - —
Hexylresorcinol, USP, dms., 25-lb. lots or more, dlvd lb 14.00 - —
dms. smaller lots, dlvd lb 14.50 - —
Homatropine hydrobromide, USP, bots oz 3.25 - —
Homatropine methylbromide, USP, bots oz 3.00 - 3.25
Hoofmeal, 17-18% ammonia bulk, c.l., Chicago unit-ton 6.75 - —
Horehound herb, bls lb .18 - .20
Hydrastis (see Goldenseal).
Hydrazine hydrate, 85% ret. dms., works lb 1.35 1.55
100%, ret. dms., works lb 1.60 1.90
Hydriodic acid, purif., 47%, 2-cbys., f.o.b works lb 2.92 —
Hydroabietyl alcohol, tech., solid, dms., c.l., dlvd, zone 1 lb .29¼- —
dms., l.c.l., dlvd, zone 1 lb .29¾- .30⅛
tanks, dlvd zone 1 lb .27¼- —
Zone 1 for hydroabietyl alcohol comprises all of continental US except Ariz., Calif., Colo., Idaho, Mont., Nev., N. M., Ore., Utah, Wash., Wyo., and the western part of Texas.
Hydrobromic acid, medicinal, 48%, cbys. frt equald lb .48 - .56
Hydrochloric acid, anhyd (see Hydrogen chloride)
Hydrochloric acid, 18° cbys., c.l., works 100 lbs 2.50 - —
cbys., l.c.l., dlvd. Metropolitan area 100 lbs 2.90 3.05
tanks, works, frt. equald ton 28.00 - —
20°, cbys., c.l., works 100 lbs 2.75 - —
cbys., l.c.l., dlvd Metropolitan area 100 lbs 3.15 - —
tanks, works, frt equald ton 30.00 - —
22°, cbys., c.l., works 100 lbs 3.25 - —
cbys. l.c.l., dlvd Metropolitan area 100 lbs 3.65 - —
tanks, works, frt equald ton 35.00 - —
Hydrochloric acid CP, USP, consumers, cbys., extra, c.l., works lb .15¾- —
cbys. l.c.l., same basis lb .17¼- .17¾
5-pint bots., extra cs., c.l., same basis lb .20¾- —
lb .20¾- —
Hydrocortisone acetate, bulk, bots., kilo lots or more gram .95 - —
Hydrocortisone alcohol, bulk, bots., kilo lots or more gram 1.00 - 1.90
Hydrocyanic acid, dilute, NF, 2%, 5-pint bots., f.o.b. works, pint .70 - —
Hydrofluoric acid, anhyd. (see Hydrogen fluoride)
Hydrofluoric acid, aqueous, 70%, 55-gal. or 30-gal dms. c.l., t.l., dlvd 100 lbs 19.25 - —
55-gal. dms., l.c.l., t.l.t., dlvd 100 lbs 20.75 - —
20-gal. dms., c.l., t.l., dlvd 100 lbs 21.00 - —
20-gal., dms., l.c.l., t.l.t., dlvd. 100 lbs 22.50 - —
tanks, works frt. equald 100 lbs 13.40 —
Delivered prices apply to all states east of Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Washington and Wyoming. In those states add $2.70 per cwt. for drum delivery
Hydrofluosilicic acid, dms., works, 30% basis lb .07 - —
Hydrofuramide, dms., fib ctns., works lb .30 - .40
50-lb cyls., l.c.l., works lb .55 - .60
Hydrogen chloride, anhyd., 50-lb. cyls, l.c.l., works lb .45 - —
Hydrogen cyanide liq., 96% tanks, works lb .14 - —
Hydrogen fluoride, anhyd., cyls., dlvd. E lb .30½- .32½
cyls., dlvd W lb .39 - —
tanks, works lb .18 - —
Hydrogen peroxide, 35%, dms., c.l., dlvd lb .202 - —
dms., l.c.l., dlvd. lb .211 - —
tanks, dlvd. lb .1800- —
Hydroquinone, photo grade, dms., 50-lbs. f.o.b works lb 1.10 —
Tech., dms., c.l., dlvd. lb .82½- —
dms. l.c.l. dlvd lb .84½- —
Hydroquinone monomethyl ether, dms., t.l. dlvd lb 2.59 - —
dms., t.l.t., dlvd lb 2.61 - —
Hydroxyacetic acid, tech., 70% dms. Philadelphia and Chicago lb .11 - —
tanks Helle W Va lb .073 - —
Hydroxycitronellal, cns. lb 5.70 - 6.00
Hydroxyethyl cellulose, fib, dms., 20,000-lb. lots or more, f.o.b. shipping point lb .74 - —
fib dms. 4,000 to [illegible] lots, same basis lb .79 - —
fib dms. 100 to [illegible] lots, basis lb .83 - —
Hydroxyethyl cellulose, fib, dms., smaller lots, same basis lb .93 - —
(Highest viscosity [15,000 cps.] grade is 10c. per lb. higher.)
Hyoscine salts (see Scopolamine).
Hyoscyamine hydrobromide, bots oz 7.75 - 8.50
Hyoscyamine sulfate, bots oz 7.75 - 8.50
Hypophosphorous acid, purif., 50%, 10-cbys. f.o.b works lb 1.95 - —
NF, 50% 10-cbys., same basis lb 1.35 - —

## I

Ichthammol NF, dms lb .75 - 1.05
Indigo (see Dyes, coaltar, 1171 indigo, syn.)
Indole CP bots lb 13.75 - 15.00
Inositol, 50-100 lb dms., 1,000 lbs. or more, dlvd lb 4.50 - —
50-lb. dms., less than 1,000 lb., dlvd lb 4.75 - —
10 lb cns., 10-50 lbs dlvd lb 5.00 - —
5 lb bots., dlvd lb 5.25 - —
Insect flowers (see Pyrethrum)
Iodine, crude, kgs lb 1.10 - —
Resub., USP, dms., f.o.b. works lb 2.20 - 2.22
Iodochlorhydroquinolin, USP, dms. lb 3.60 - —
Iodoform NF, dms, 300-lbs. f.o.b. works lb 4.90 - —
dms, 100-lbs., same basis lb 5.05 - —
a-Ionone, cns lb 4.60 5.75
b-Ionone, cns lb 4.15 6.15
Ipecac root, whole, bgs lb 8.00 - 8.50
Powd., bbls., bxs lb 9.50 -10.00
Irish moss, bleached, prime, bls lb .30 - .32
Iron blue, alkali-resisting, bbls., c.l., dlvd. E lb .60 - —
bbls. l.c.l. ton lots, same basis. lb .61 - —
bbls., smaller lots, same basis. lb .62 - —
Dom., reg. bbls., c.l., dlvd. E lb .55 - —
alkali-resistant, dom., reg., bbls., c.l., ton lots, same basis lb .56 - —
bbls. l.c.l., smaller lots same basis lb .57 - —
Imp. British, reg. bbls. c.l. dlvd. E lb .48 - —
bbls. l.c.l. ton lots, same basis lb .49 - —
bbls., l.c.l., smaller lots, same basis lb .50 - —
Iron blue dlvd. prices 1c higher for Pacific Coast states: Wash., Ore., Cal., N. M., Ariz., Mont., Wyo., Utah, Col. and Nev.
Iron compounds (see Ferric or Ferrous).
Iron oxide, black, pure, bgs., c.l., works lb .14¾- —
bgs. l.c.l., works lb .15 - —
Iron oxide, brown, pure, bgs., c.l., works lb .14¼- —
bgs., l.c.l., works lb .14½- —
Iron oxide, metallic, brown, bgs., works lb .05½- —
Iron oxide, Persian Gulf, red., bgs., c.l., works lb .08¾- —
Iron oxide, red, dom., pure, bgs., Bethlehem, E. St. Louis, New York City lb .14¼- —
Iron oxide, red, nat., 75-85% ferric oxide, bgs., c.l., works lb .06¼- —
bgs. l.c.l. works lb .06½- —
Iron oxide, Spanish red, bbls., c.l., ex dock lb .05¾ Nom.
bbls. l.c.l. ex dock lb .06 Nom.
bbls., l.c.l., ex whse, New York lb .06½ Nom.
Iron oxide, yellow, nat., French type, bgs., c.l., works lb .06¾- .07
Peruvian type, bgs. l.c.l. lb .023 .024
Iron oxide, yellow, pure, light lemon shade, bgs c.l. works lb .12¼- —
other shades, same basis lb .12 - .12½
Isoamyl alcohol, dms. c.l., works, frt. alld E lb .27½- —
dms., l.c.l., same basis lb .29 - —
tanks, same basis lb .25 - —
Isoborneol, cns lb 1.44 1.80
Isobornyl acetate, cns lb .46 .56
Isobornyl formate, dms lb 1.15 1.20
Isobornyl propionate, dms lb 1.20 1.25
Isobutyl acetate, perfume grade, cns lb .30 - .35
Solvent grade, dms., c.l., dlvd. E. of Rockies lb .15¼- —
dms., l.c.l., same basis lb .16¾- —
tanks, same basis lb .12¾- —
Isobutyl alcohol, dms., c.l., dlvd lb .15½- —
dms., l.c.l., dlvd. lb .17 - —
tanks, dlvd lb .13 - —
Isobutylene, 99% tanks, works gal .38 - —
Isobutyl isobutyrate, dms., f.o.b. works lb .75 - —
Isobutyraldehyde, CP, dms., c.l., dlvd lb .27½- —
dms., l.c.l., dlvd. lb .28½- —
Tech., dms., c.l., dlvd. lb .22 - —
dms., l.c.l., dlvd. lb .23 - —
tanks, dlvd lb .19½- —
Isobutyric acid, dms. c.l., t.l., dlvd. lb .35 - —
dms., l.c.l., t.l.t., same basis lb .36½- —
t.c. t.t. same basis lb .33 - —
Isobutyronitrile, dms., c.l., dlvd. lb .47½- —
dms., l.c.l., dlvd lb .48½- —
tanks, dlvd lb .45 - —
Isoeugenol, cns lb 3.10 - 3.40
Isoniazid, powd., bulk, 50 kilos kilo 12.00 —
Isonicotinic acid, 100-lb tib. dms., works lb 4.25 - —
Isonicotinic acid hydrazide (see Isoniazid)
Iso-octyl alcohol, dms., c.l., dlvd. E. lb .23½- —
dms., l.c.l., dlvd. E. lb .25 - —
tanks, dlvd E lb .21 - —
Isopentane, coml. grade, tanks, f.o.b Tex refy gal .16½- —
Isophorone, dms., c.l., dlvd lb .24½- —
dms., l.c.l., dlvd lb .25¼- —
tanks, dlvd lb .22½- —
Isophthalic acid, dms., c.l., works, frt. equald lb .19 - —
dms., l.c.l., same basis lb .20 - —
Isopropanol (see Isopropyl alcohol).
Isopropyl acetate, dms., c.l., dlvd. lb .14 - —
dms., l.c.l., same basis lb .15½- —
tanks, same basis lb .11½- —
Isopropyl alcohol, refd., 91%, dms., c.l., dlvd gal .58 - —
dms., l.c.l., dlvd. gal .68 - —
tanks, dlvd. gal .42 - —
Isopropyl alcohol refd., 95%, c.l., dms., dlvd gal .60 - —
dms., l.c.l., dlvd. gal .70 - —
tanks, dlvd. gal .44 - —
Isopropyl alcohol, anhyd., c.l., dlvd. gal .62 - —
dms., l.c.l., dlvd. gal .72 - —
tanks, dlvd gal .46 - —
Isopropyl benzene (see Cumene).
Isopropyl ether, dms., c.l., dlvd lb .09½- —
dms. l.c.l., dlvd. lb .11 - —
tanks, dlvd lb .07 - —
Isopropyl-N-(3-chlorophenyl) carbamate (CIPC) tech., dms., c.l. t.l., works lb 1.00 —
dms., l.c.l. works lb 1.05 1.25
tanks, works lb .99 —
Isopropylamine (see Mono, Di, or Tri-).
Isopropyl-N-phenyl carbamate, 450-lb fib dms. c.l., t.l., works lb .75 - —
450-lb. fib dms., l.c.l., works lb .80 - .90
Isoquinoline, dms., works lb .48 1.20
Itaconic acid, refd., bgs., c.l., f.o.b. works lb .39½- —
bgs., l.c.l., same basis lb .41 - .43
Tech., bgs., c.l., same basis lb .34½- —
bgs., 500-lbs. same basis lb .36 - —

## J

J acid, paste, bbls., works, 100% basis lb 2.70 - —
Powd., bbls., same basis lb 2.75 - —
Jalap root, NF, bls lb .55 - .60
NF, powd., bbls., bxs lb .65 - .70
Japan wax, cs lb .29 .31
Juniper berries, bgs lb .16 .17
Juniper berry oil, NF, bots lb 2.90 3.75
Twice rectified, bots lb 3.25 —
Juniper tar oil, NF, dms lb .42 .60
Juniper wood oil, tech, cns lb .38 .55

## K

Kaolin (see also Clay, China).
Kaolin NF, powd., fib dms lb .10 .12
NF colloidal 50-lb. bgs lb 15½ .17½
Karaya gum, No. 1, NF, powd., bls lb .48 .50
No. 2, powd, bbls lb .43 .45
No. 3, powd, bbls lb .37 .40
Koch acid, bbls, frt. alld., 100% basis lb 1.00 —
Kola nuts, bgs lb .11 .12

## L

L acid, bbls., works lb 1.25 —
Lacquer diluent petroleum, 140°F. 200°F b.r., tankcars, New Jersey and New York gal .20 —
Group 3 gal .15125- —
Houston, Texas gal .16 —
200°F-240°F b.r., tankcars, New Jersey or New York gal .20 —
Group 3 gal .14125- —
Houston, Texas gal .16 —
Lactic acid, edible, 50%, bbls. dms., c.l., frt. equald lb .1985- —
bbls., dms., 20 or more, frt. equald lb .2035- —
bbls., dms., 5 to 19, frt. equald. lb .2085- —
bbls. dms., 1 to 4, frt. equald. lb .2135- —
80%, bbls., c.l., dms., frt. equald. lb .3335- —
bbls. dms., 20 or more, frt equald lb .3385- —
bbls., dms., 5 to 19 frt. equald. lb .3435- —
bbls. dms., 1 to 4, frt equald. lb .3485- —
Plastic grade, 50%, c.l., bbls., works lb .2740- —
bbls., 20 or more, works lb .2790- —
bbls. 5 to 19 works lb .2840- —
bbls., 1 to 4, works lb .2890- —
80% bbls. c.l. works lb .4025- —
bbls. 5 to 19 works lb .4725- —
bbls. 1 to 4, works lb .4775- —
Tech., 44%, bbls., c.l., works, 100 lbs. 12.45 - —
bbls., l.c.l., works 100 lbs 12.85 —
USP 85% cbys lb .85 —
Lactose, crystalline, edible, bgs., 23,000-lb lots, frt equald lb .14 —
bgs., 6,000-lb lots, frt equald lb 14½- —
bgs., 2,000-lb lots, frt equald lb 14¾- —
bgs., 200-lb lots, frt equald lb 15¼- —
Edible lactose in fib dms. ½c higher
Lactose, ferment. grade, bgs., c.l., works lb .08¾- —
USP, reg., fib. dms., 30,000-lb. lots, frt. equald lb .21½- —
fib. dms., 2,000-lb lots, frt. equald lb .22¼- —
200-1,880-lb lots, frt. equald lb .22¾- —
USP lactose in bags ½c to 1c lower
Lactose, USP spray dried, bgs., t.l., frt. equald lb .18½- —
bgs. t.l.t. frt. equald lb .19 19¾
Lady's slipper root, bls lb 3.00 3.50
Lamp black, bgs., c.l., works lb .16 .45
Lanolin, USP anhyd. 400-lb dms., works lb .24 .26
USP, annyd., cosmetic, 400-lb. dms., works lb .26 .30
USP hydrous, 400-lb dms., works. lb .20 —
Lard, cash, dms., Chicago lb .13 - —
Lard oil (see grease oil).
Larkspur seed bgs lb .55 —
Laurel leaf oil dms cns lb 9.75 .12.50
Laurent's acid, bbls lb .87 - —
Lauric acid, pure, dms lb .30¼- .32¾
bags lb .28¾- .31¼
tanks lb .27¾- —
Lauryl alcohol, bots lb 2.00 2.50
n-Lauryl methacrylate, dms., c.l., t.l., works lb .65½- —
dms. t.l.t., works lb .66 - —
Lavandin oil, 22-24%, dms lb 1.15 - —
Abrial, dms lb 1.20 - —
Lavender flowers, medium, bls lb .55 .60
Ord., bls lb .20 .25
Select., bls lb .90 1.00
Lavender flower oil, USP, French, 35-37% ester, cns lb 1.85 4.00
40-42% ester, cns lb 3.50 - 3.65
Spike, Spanish, cns lb 1.75 2.00
Lead acetate, NF, cryst., gran., powd., bbls lb .34½- —
White, cryst., bbls lb .25½- —
gran. bbls lb .26½- —
powd. bbls lb .26½- —
Lead arsenate acid powder, dealers, 3-50-lb bgs or any quantity frt alld on $150 or more lb .30½- —
1-lb bgs, same basis lb .47 —
Lead, blue, basic sulfate, bbls., c.l., shipt point, frt. alld lb .17 - —
bbls., l.c.l. same basis lb .18 - —
Lead carbonate (see Lead, white, basic carbonate)
Lead chloride, 400-lb. fib. dms lb .56 - —
Lead iodide NF V tars lb 3.82 - —
Lead linoleate, fused, 26.5% Pb, dms. lb .38 - —
Lead metal, prime, pigs, New York lb .11 - —
St. Louis lb .1080- —
Lead monosilicate, bgs., c.l., works, frt equald lb .1385- —
bgs., l.c.l., same basis lb .1485- —
Lead naphthenate, liq., 16% Pb., dms. dlvd lb .19½- —
24% Pb. dms., dlvd lb .24¼ —
Solid, 47% Pb., dms dlvd lb .31¾ —
Lead nitrate, tech., cryst., 400-lb. fib. dms lb .2675- —
Lead orthosilicate gel, 50-60% $PbO$, dms. works lb .29¾ .34¼
Lead peroxide, tech powd. bbls lb .45 .50
Lead phthalate dibasic, dms. works. lb .41 —
Lead, red, 95% $Pb_3O_4$, or less, bbls., c.l., works, frt. equald. lb .1375- —
bbls., l.c.l., same basis lb .1475- —

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# U.S.I. CHEMICAL NEWS

April ★ A Series for Chemists and Executives of the Solvents and Chemical Consuming Industries ★ 1961

# U.S.I. TO BUILD PLANT FOR LINEAR POLYETHYLENE AT HOUSTON, TEXAS

## New Facility Will Have Annual Capacity of 60 Million Pounds

U.S.I. will begin construction this Spring of a 60 million pound-per-year linear polyethylene plant at Houston, Texas, adjacent to the company's conventional polyethylene facilities. The new plant, which will mark U.S.I.'s entry into the manufacture of linear polyethylene, is scheduled for completion in the fourth quarter of 1962.

Recently there has been considerable discussion about over-capacity in the linear polyethylene field. Dr. Robert Hulse, general manager of U.S.I., states: "We would not be building this important new plant if we did not believe that over-capacity is a short-term problem and that linear polyethylene is growing in importance. Every market projection we have made indicates that this versatile plastic will be in short supply by early 1963."

**PETROTHENE® Trade Name to Be Used**

The new U.S.I. plant, designed for easy expansion, will be managed by the same people who are now running the low and medium density polyethylene plant at Houston. The linear polyethylene will be manufactured under a licensing agreement with Phillips Petroleum Company, and will be sold under U.S.I.'s trade name, "PETROTHENE®" polyethylene resin.

Linear polyethylene is stronger and more rigid than the conventional type. It

MORE

## *Soviets Sign Agreement With N. Y. Publisher on Scientific Translations*

A contract for the exclusive, worldwide English language rights to Soviet scientific books for the next six years has been signed by the official Soviet book export agency and Consultants Bureau, a New York publisher.

The books covered include important Soviet symposia, monographs, conference proceedings and collections, all on highly specialized scientific and technical subjects. The contract should result in much-improved communications between Soviet and American scientists.

Earlier in 1960, Consultants Bureau obtained exclusive rights to translate 23 major Soviet journals in the fields of chemistry, physics, biology, medicine.

All books published by Consultants Bureau will, in the future, be made available to English-speaking scientists within six months of their publication in the USSR. Where the importance of Soviet conferences warrants even speedier dissemination of their proceedings, Consultants Bureau will publish English translations at the same time as the Russian originals appear in the USSR.

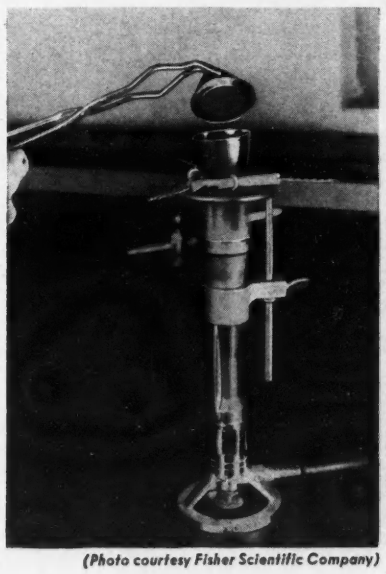
## New Technique Prevents Hydrogen Embrittlement of Tantalum in CPI Equipment

Tantalum metal can be easily protected against hydrogen embrittlement via a technique developed recently. The method consists of affixing to the tantalum a small piece of platinum. The platinum is reported to protect an area 10,000 times larger than itself for over 1,000 hours.

Tantalum is a corrosion resistant metal with excellent high temperature properties. It has shown great promise as a

MORE

## Zirconium Crucibles Pinch-Hit for Platinum



*(Photo courtesy Fisher Scientific Company)*

Solid zirconium crucibles, currently only 1/6th the price of platinum, are now available for laboratory use. According to a recent report, the new crucibles permit budget-conscious labs to make large numbers of peroxide and carbonate fusions without investing in costly platinumware.

With normal care, the new crucibles are said to last for at least 100 sodium peroxide fusions at 460°C. They can be used at temperatures up to 900°C. for sodium and potassium carbonate fusions, preferably in the reducing atmosphere of a burner flame rather than in a furnace.

Nickel, iron or porcelain crucibles present the problem of sample contamination by material dissolving from their walls. With zirconium, however, it is reported that after 20 to 50 peroxide fusions, only 0.1%-2% per fusion is lost.

## *Polyethylene Mulch Film Improves Vegetable Yields*

Polyethylene mulch film has increased test vegetable yields as much as 100%, according to findings of the Oregon (Corvallis) and South Dakota (Brookings) State College Agricultural Experiment Stations reported by James P. Menn, U.S.I.'s Staff Agronomist at the 73rd Annual Meeting of the Florida State Horticultural Society.

Corvallis tests on tomatoes resulted in a marketable yield of over 20 tons per acre with polyethylene mulch and about 10 tons per acre without mulch. Other Corvallis tests showed increased pole bean

MORE

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CONTINUED

## *Polyethylene Mulch Film*

and cantaloupe yields also. Tests at Brookings indicated significant yield increases for sweet corn, snap beans, carrots, cabbage and cucumbers.

Polyethylene film is said to be particularly well suited for use as mulch. Its physical properties can be varied to raise or lower soil temperatures, conserve soil moisture, control weeds and plant diseases. It is highly impermeable to water vapor. Its use often results, not only in early crop set and harvest, but also in increased marketable yields which more than justify its cost.

Polyethylene mulch is available commercially as a durable, flexible, lightweight black film. Special-purpose white-pigmented and colored polyethylene mulch films are now being researched.

Current interest is indicated by the fact that some 33 land grant colleges are carrying on, or have completed, research projects on plastic mulch materials. However, it is reported that if such materials are to become widely used, more study will be needed on improving application equipment.

A copy of Mr. Menn's paper is available from U.S.I.

**The plant at left was grown with polyethylene mulch film, the one at right without. Note healthier look, greater yield.**

CONTINUED

## *Tantalum*

material of construction for the chemical process industries. However, use of tantalum has been limited in certain applications because it is subject to stress cracking and failure due to hydrogen ion absorption into the metal lattice. In tests over the past three years, small platinum spots riveted or spot welded to tantalum have protected the latter metal from concentrated hydrochloric acid at 374°F. for over 1,000 hours. By contrast, unprotected tantalum becomes brittle in a few hours.

Tantalum's rate of corrosion is not increased by contact with the platinum, it is reported. In fact, in some cases, it is decreased. At the same time, the platinum's rate of corrosion, usually high in concentrated hydrochloric at high temperatures, is decreased to almost zero.

It is felt that the new development will greatly increase the utilization of tantalum metal for chemical plant equipment.

CONTINUED

## *Linear Polyethylene*

is widely used for blow-molded bottles and containers for industrial products, detergents and other household staples. Other growing markets include injection molded items such as toys and housewares; extruded pipe; and film for heavy duty bags and similar products.

### Company Makes Wide Range of Resins

U.S.I. facilities for conventional polyethylene have a rated capacity of 300 million pounds annually. The company currently produces some 100 types of 36 basic low and medium density resins at plants in Houston and Tuscola, Ill. Linear resins are also currently available from U.S.I. pilot plant facilities and through resale arrangements.

## TECHNICAL DEVELOPMENTS

*Information about manufacturers of these items may be obtained by writing U.S.I.*

**Plastic laboratory ware** is subject of new catalog which includes many items not previously available in plastic, such as Buchner-type filter funnels and 125 ml. Erlenmeyer flasks. Special section on polyethylene properties. **No. 1700**

**Color-coating of all types of metals in single treatment** is now claimed possible with new chemical surface treating process now ready for commercial application. New coatings can be clear or colored; are reported color-fast, corrosion-resistant, easy to apply. **No. 1701**

**E-t-butyl alcoholate** now available in pilot plant quantities. Is essentially alcohol-free. Said to have found wide use as catalyst in base-catalyzed reactions on research scale. **No. 1702**

**New line of metering pumps for drums and pails** has just been introduced. Pump for 5- and 6-gallon pails is self-priming, dispenses 4 oz. per stroke. Pump for 15-, 30-, 55-gallon drums dispenses 8 oz. per stroke. **No. 1703**

**Metal cleaner now on market** is formulated to remove build-up of iron and nickel oxides from tanks, lines, nozzles, fittings in sulfuric acid or nickel sulfate service. Said to be non-fuming, weakly acidic. **No. 1704**

**Four new instrumentation systems,** based on nuclear methods, have been developed for continuous measurement and control of moisture and density of materials on conveyor belts and in pipes, bins, hoppers, tanks, mixers, blenders. **No. 1705**

**Cryogenic ball valves** now on market handle hydrogen, oxygen, helium, nitrogen—as liquids. Vacuum-jacketed types furnished when extreme low-temperature storage with minimum heat leak is required. Claimed extremely tight-sealing. **No. 1706**

**New foaming agent** for use in air drilling of oil wells beset by water encroachment is said to produce large quantities of stable, light-density foam and to be unaffected by high concentrations of dissolved solids. **No. 1707**

**New spray gun for applying heavy thickness floor coatings** said to give smooth, even coat of catalyzed coatings mixed with fillers such as silica and aluminum oxide. Coatings can be sprayed from 1/16 in. up to any thickness. **No. 1708**

**Interchangeable type system for typewriters,** now on market, allows use of about 400 characters not on standard typewriter, without installing new type keys. Includes chemical and mathematical symbols, Greek letters, subscript and superscript numbers. **No. 1709**

## PRODUCTS OF U.S.I.

**PETROTHENE®... Polyethylene Resins**

**MICROTHENE...** Finely Divided Polyethylene Resin.

**Organic Solvents and Intermediates:** Normal Butyl Alcohol, Amyl Alcohol, Fusel Oil, Ethyl Acetate, Normal Butyl Acetate, DIATOL®, Ethyl Ether, Acetone, Ethyl Chloroformate, Ethylene, Sodium Ethylate, Urethan U.S.P. (Ethyl Carbamate).

**Pharmaceutical Products:** DL-Methionine, N-Acetyl-DL-Methionine, Urethan USP, Intermediates.

**Ethyl Alcohol:** Pure and all denatured formulas; Anhydrous and Regular Proprietary Denatured Alcohol Solvents SOLOX®, FILMEX®, ANSOL®M, ANSOL PR

**Heavy Chemicals:** Metallic Sodium, Anhydrous Ammonia, Ammonium Nitrate, Nitric Acid, Nitrogen Fertilizer Solutions, Phosphatic Fertilizer Solution, Sulfuric Acid, Caustic Soda, Chlorine, Sodium Peroxide.

**Animal Feed Products:** DL-Methionine, MOREA® Premix (to authorized mixer-distributors).

**U.S.I. INDUSTRIAL CHEMICALS CO.**
Division of National Distillers and Chemical Corporation
99 Park Avenue, New York 16, N. Y.

**U.S.I. SALES OFFICES**

Atlanta • Baltimore • Boston • Chicago • Cincinnati • Cleveland
Detroit • Kansas City, Mo. • Los Angeles • Louisville • Minneapolis
New Orleans • New York • Philadelphia • St. Louis • San Francisco

| | | | |
|---|---|---|---|
| Lead, red, 97% $Pb_3O_4$, bbls., e.l., same basis | lb. | .1395 | — |
| bbls., l.c.l., same basis | lb. | .1495 | — |
| 95% $Pb_3O_4$, bbls., e.l., same basis | lb. | .1410 | — |
| bbls., l.c.l., same basis | lb. | .1510 | — |
| Lead, resinate, precip., 23%Pb. dms., | lb. | .49 | — |
| Lead salicylate, normal dms. works | lb. | .46 | — |
| Lead silicate (see Lead white basic silicate). | | | |
| Lead silicochromate, bgs., c.l., f.o.b. mfrs. point, frt. alld | lb. | .20 | — |
| bgs., l.c.l., same basis | lb. | .21 | — |
| Lead sulfate (see Lead blue basic sulfate). | | | |
| Lead tallate liq., 16% Pb, dms | lb. | .17¼ | — |
| 24% Pb, dms | lb. | .21¼ | — |
| Solid, 30% Pb, dms | lb. | .26¾ | — |
| Lead white, basic carbonate, bgs., c.l., shipt pt., frt. alld | lb. | .18 | — |
| bgs. l.c.l., same basis | lb. | .19 | — |
| Lead, white, basic silicate, bgs., c.l., shipt. pt., frt. alld | lb. | .16½ | — |
| bgs., l.c.l., same basis | lb. | .17½ | — |
| Lecithin, edible, tech., bleached, non-ret. dms., e.l., works. | lb. | .14 | .15 |
| non-ret dms., l.c.l., same basis | lb. | .15 | .16 |
| unbleached, non-ret. dms., c.l., same basis | lb. | .13 | .14 |
| non-ret. dms. l.c.l., same basis | lb | .14 | .15 |
| Lemon bioflavonoid complex, 50 kilos, f.o.b. works | kilo. | 14.20 | — |
| Lemon oil, USP, Calif., cns., dms | lb. | 1.80 | 2.50 |
| Messina cns. | lb | 3.25 | 4.00 |
| Lemongrass oil, cns., dms | lb. | 2.45 | 2.50 |
| dl-Leucine, dms., 1 kilo, works | kilo. | 50.00 | — |
| Licorice root, gran., bls. | lb. | .12 | — |
| Powd., bls. | lb | .15 | .16 |
| Whole, bls. | lb | .09 | .10 |
| Lignaloe wood oil, Mexican, cns | lb. | 2.75 | 3.50 |
| Lignosulfonate (see under Ammonium or Sodium lignin sulfonate) | | | |
| Lilac oil | lb. | 1,500.00 | |
| Lime, chemical (quicklime), bulk, c.l., 50,000 lbs. works, E | ton. | 14.25 | — |
| Chemical, hydrated, bgs., c.l., same basis | ton. | 17.25 | — |
| spray, bgs., c.l. same basis | ton. | 18.25 | — |
| For New York delivery, add $6.29 freight charge | | | |
| Lime oil, dist., Mexican, dms | lb. | 5.50 | 6.00 |
| West Indian, dms | lb. | 5.50 | 6.00 |
| Expressed, West Indian, dms | lb. | 6.50 | 7.75 |
| Lime salts (see Calcium) | | | |
| Lime-ammonium nitrogen, 20.5% N (see Ammonium nitrate with dolomite). | | | |
| Linalool, ex bois de rose oil, dms. | lb. | 2.45 | 4.25 |
| Syn., 98-100% dms., works | lb | 2.40 | 2.75 |
| Linalyl acetate ex bois de rose, 90-92%, dms | lb. | 2.65 | 4.50 |
| 96-98%, dms | lb | 3.25 | — |
| Syn., 98-100%, dms., works | lb. | 2.75 | — |
| Lindane, 25% formulation, to distributors, dms., frt. alld. | lb. | 1.35 | 1.50 |
| 99%, tech. to formulators, 250-lb. dms., 5,000 lbs., dlvd | lb. | 2.13 | — |
| 100-lb. dms. 5,000-lbs., dlvd. | lb. | 2.15 | — |
| 250-lb. dms. less than 5,000-lbs., dlvd | lb. | 2.18 | — |
| 100-lb. dms. less than 5,000-lbs., dlvd | lb. | 2.20 | — |
| Linden flowers, with leaves, bls | lb. | .35 | .40 |
| Without leaves, bls. | lb. | .42 | .45 |
| Linseed meal, expeller, 32% bulk, Minneapolis, mills | ton. | 58.50 | — |
| Extracted, 34% bulk, same basis | ton. | 53.00 | — |
| Linseed oil, raw, dms., c.l., New York | lb. | .1670 | — |
| dms., l.c.l., New York | lb. | .1760 | .1810 |
| tanks, f.o.b. Minneapolis | lb. | .1310 | — |
| tanks, New York | lb. | .1422 | — |
| tankwagon, New York | lb. | .1472 | — |
| Boiled linseed oil, .006c. per lb. higher. | | | |
| Linseed oil acid, dist., dms | lb. | .2075 | — |
| Water white, dms | lb. | .2425 | — |
| Litharge, coml., powd., bbls., c.l., works, frt. equald | lb. | .1325 | — |
| bbls., l.c.l., same basis | lb. | .1425 | — |
| Lithium aluminum hydride, lump, dms., works | lb. | 33.00 | 39.00 |
| Lithium benzoate, dms. | lb. | 1.65 | 1.67 |
| Lithium bromide, NF, gran., bgs., works, frt. equald | lb. | 2.60 | — |
| Lithium carbonate, NF, dms., ton lots | lb. | .58 | — |
| dms., 1,999 lbs. or less | lb. | .64 | — |
| Tech., dms., ton lots | lb. | .57 | — |
| dms., 1,999 lbs. or less | lb. | .63 | — |
| Lithium chloride, CP, anhyd., dms., ton lots | lb. | 1.23½ | — |
| Tech., anhyd., dms., c.l., t.l., dlvd. or works, frt. alld | lb. | .87 | — |
| dms., l.c.l., same basis | lb. | .88 | .93 |
| Lithium citrate, NF, dms. ton lots. | lb. | 1.50 | — |
| Lithium fluoride, dms., 20,000-lb. lots, dlvd | lb. | 1.75 | — |
| bbls., ton lots and more, dlvd | lb. | 1.85 | — |
| bbls., less ton lots, dlvd | lb. | 1.90 | — |
| Lithium hydride, powd., dms., 500-lbs. lots or more, works. | lb. | 9.50 | — |
| Lithium hydroxide, monohydrate, dms., c.l., t.l., frt. alld | lb. | .60 | — |
| dms., l.c.l., frt. alld | lb. | .64 | — |
| Lithium manganite, dms. works | lb. | .95 | 1.05 |
| Lithium nitrate, tech., dms., 100-lb lots | lb | 1.15 | 1.25 |
| Lithium salicylate, dms. | lb | 1.60 | 1.70 |
| Lithium silicate, dms., works | lb. | 1.10 | 1.20 |
| Lithium stearate, dms. c.l., works. | lb. | 47½ | — |
| dms. ton lots works | lb. | .48½ | — |
| dms., less-ton lots, works | lb. | .53½ | — |
| Lithium sulfate dms., 100-lb. lots. | lb | 1.15 | 1.25 |
| Lithium titanate dms., works | lb. | 1.15 | 1.25 |
| Lithol red toner, barium, bbls., works | lb. | 1.03 | — |
| Lithol-rubine red toner, pure, bbls., works | lb. | 1.65 | — |
| Resinated, bbls., works | lb. | 1.47 | — |
| Lithopone ord., bgs., c.l., dlvd E. | lb. | .06¾ | — |
| bgs., l.c.l., dlvd. E | lb. | .09⅛ | — |
| Titanated (high-strength), bgs., c.l., dlvd | lb. | .11 | — |
| bgs., l.c.l., dlvd. | lb. | .12 | — |
| Lobelia herb, bls. | lb. | .95 | 1.10 |
| Lobeline sulfate, bots., 50-oz. lots, works | oz. | 30.00 | — |


Interested personal service—
always—
when you buy from Eastman

**Eastman Solvents**

Acetone

Ethyl Alcohol

Tecsol®
proprietary ethyl alcohol
95% and anhydrous

Isobutyl Alcohol

n-Butyl Alcohol

2-Ethylhexyl Alcohol

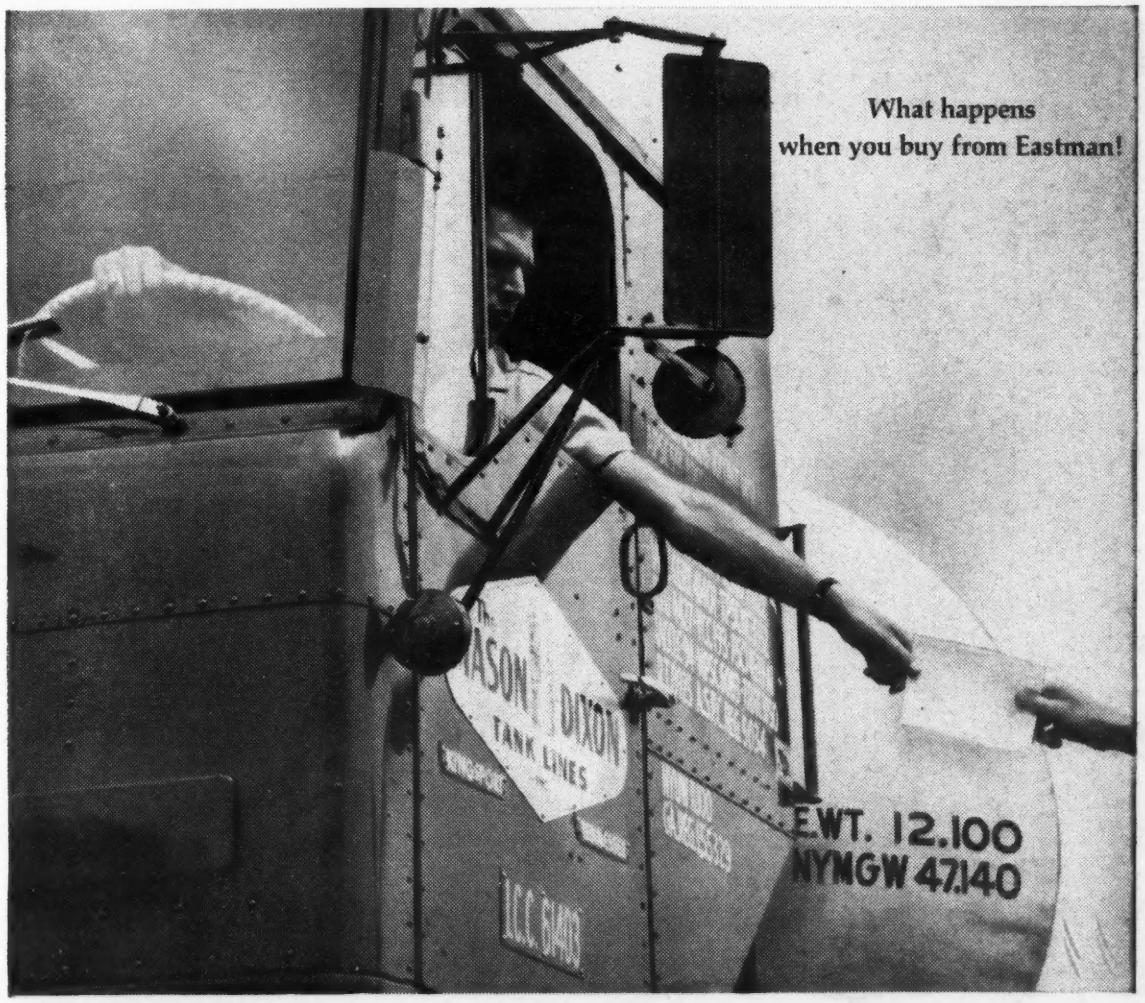
Ethyl Acetate

Isopropyl Acetate

n-Butyl Acetate

Isobutyl Acetate

For properties and shipping information on these and other Eastman products, see Chemical Materials Catalog, page 363, or Chemical Week Buyers' Guide, page 107.




**Tank truck delivery on Saturday afternoon**

"Every now and then we are able to make special service seem real easy," recalls one of our sales coordinators.

"Like the time we filled an order for a tank truck of acetone on Saturday afternoon—and it arrived at the customer's plant before dark.

"I was busy at home (the third inning was just over) when the customer traced me through our plant switchboard operator. He had unexpectedly run out of acetone and was faced with the prospect of shutting down unless he could obtain at least enough to tide him over the weekend.

"I guess it took all of three minutes to complete two phone calls, including one back to the customer to tell him that we could make the shipment, and for him to have a crew stand by about 6:30 P.M. to unload a tank truck.

"Of course, we had a number of things working for us on this one. First, the customer's plant was only four hours away by truck. Second, he was able to catch me at home; and third, the customer had a tank truck order for acetone scheduled for Monday delivery, and this tank truck just happened to be loaded, approved, and at the terminal ready to go."

**We were lucky in this instance, but do all we can every time, to assure our customers the best service possible.**

**Eastman** CHEMICAL PRODUCTS, INC., KINGSPORT, TENNESSEE, Subsidiary of Eastman Kodak Company

SALES OFFICES: Eastman Chemical Products, Inc., Kingsport, Tennessee; Atlanta; Boston; Buffalo; Chicago; Cincinnati; Cleveland; Detroit; Greensboro, North Carolina; Houston; Kansas City, Missouri; New York City; Philadelphia; St. Louis.
West Coast: Wilson & Geo. Meyer & Company, San Francisco; Los Angeles; Portland; Salt Lake City; Seattle.

## Locust Bean Gum—Methyl Abietate

| | | | |
|---|---|---|---|
| Locust bean gum powd. bgs. | lb | .38 | .48 |
| Lycodolium, cs. | lb | 2.50 | 3.00 |
| l-Lysine monohydrochloride, 25-lb dms | lb | 4.93 | — |

## M

| | | | |
|---|---|---|---|
| Mace, Siauw, No 1, bls. | lb | 1.58 | — |
| No 2, whole bls | lb | 1.40 | — |
| siftings, bls | lb | 1.35 | — |
| Mace oil, dist., cns, dms | lb | 9.00 | 11.00 |
| Magnesia, calcined, tech, bgs., ctns., frt equald | lb | 25¼ | 26½ |
| Tech, syn, rubber grade, light, bgs., c.l., frt equald | lb | 28¼ | 30 |
| rubber grade, extra light, bgs., c.l. frt equald | lb | 28 | — |
| bgs. l.c.l., frt equald | lb | 28¾ | — |
| Above prices are quoted f.o.b. works, freight equald., with Metropolitan New York and competitive producing points | | | |
| Magnesia, calcined, tech., heavy, 85% bgs. c.l. f.o.b. Lansing, Mich | ton | 39.50 | — |
| 91% bgs. c.l., same basis | ton | 49.50 | — |
| 95% bgs. c.l. same basis | ton | 59.00 | — |
| USP, light, bgs. | lb. | .36½ | .37½ |
| USP, heavy, bgs | lb. | .36½ | .37½ |
| Magnesite, chemical grade, calcined, powd., bgs., c.l., works, frt. equald | ton | 86.25 | — |
| Magnesite, chemical grade, dead-burnt, standard grain, bulk, c.l., Chewelah, Wash | ton | 46.00 | — |
| Magnesium bromide, 80-lb. dm., f.o.b. works | lb. | 1.15 | — |
| Magnesium carbonate, tech., bgs., c.l., frt. equald | lb. | .11 | — |
| bgs., t.l., frt equald | lb. | .11½ | — |
| bgs., l.c.l. frt equald | lb | 13½ | .14 |
| USP, bgs., c.l., frt. equald | lb. | .13½ | — |
| bgs. c.l. frt equald | lb | .14 | — |
| bgs. l.c.l. frt equald | lb | 15 | 16 |
| Above prices are quoted f.o.b. works, freight equald., with Metropolitan New York and competitive producing points. | | | |
| Magnesium chloride, anhyd., 92%, flake or pebble, drums., c.l. works | lb. | 12¾ | — |
| dms. l.c.l., works | lb | 14 | 15 |
| hydrous, 99%, flake, bgs., c.l., works | ton | 60.00 | — |
| bgs., l.c.l., works | ton | 75.00 | 100.00 |
| Magnesium gluconate 100-lb dm., f.o.b works, E | lb. | 1.42 | — |
| Magnesium hydroxide, NF powd., dms., 500-lbs. or more, f.o.b. works | lb. | .24½ | .25½ |
| Magnesium lauryl sulfate, dms., c.l., frt. alld | lb. | .22½ | — |
| dms., l.t.l., frt alld. | lb. | .23½ | — |
| tanks, frt alld. | lb. | .21½ | — |
| Magnesium metal, 99.8%, ingots, 10,000-lb. lots or more, works | lb | .36 | — |
| Magnesium metal, 98.5%, pigs, 10,000-lb. lots or more, works | lb. | .35¼ | — |
| sticks, cs., works, frt alld on carlots | lb. | .59 | — |
| Magnesium nitrate, cryst., dms., works | lb. | .29 | — |
| Magnesium oxide (see Magnesia calcined). | | | |
| Magnesium phosphate, tribasic, NF, bbls | lb. | .75 | — |
| Magnesium silicate (see Talc) | | | |
| Magnesium silicofluoride, dms., works | lb | .10½ | .12 |
| Magnesium sulfate, tech., bgs., c.l., works | 100 lbs. | 2.15 | — |
| bgs. t.c.l., works | 100 lbs. | 2.90 | 3.15 |
| USP cryst., bgs. c.l. works, | 100 lbs. | 2.35 | — |
| bgs. t.c.l. 5,000 lbs., 1 withdrawal | 100 lbs. | 3.10 | — |
| bgs., smaller lots | 100 lbs. | 3.35 | — |
| Magnesium trisilicate, USP, fib dms., 5,000-lb lots | lb. | .38 | — |
| fib dms. 1,000-lb lots | lb. | .40 | — |
| fib dms. 100-lb lots | lb. | .45 | — |
| Bulky and super grades of magnesium trisilicate 7c per lb. higher. | | | |
| Malachite green, straight, PTA, bbls., works | lb. | 5.30 | — |
| Malathion, dms., c.l. works | lb. | .89 | — |
| dms., l.c.l., works | lb. | .92 | 1.01 |
| Maleic acid, cryst, powd. dms | lb. | .37½ | — |
| Maleic anhydride dms c.l. frt. equald | lb. | .24 | — |
| dms., t.c.l. frt. equald | lb. | .25½ | — |
| tanks, frt equald | lb | .22½ | — |
| Maleic anhydride in bags ½c. per lb. less. | | | |
| Malic acid, tech., dms | lb. | .50 | — |
| Mandelic acid, NF dms., 1,000-lb. lots | lb | 2.35 | — |
| dms, smaller lots | lb | 2.40 | 2.50 |
| Mandrake root, bls. | lb. | .45 | — |
| Manganese acetate, dms., dlvd | lb. | .38 | — |
| Manganese borate, tech., fib dms. | lb. | .23½ | — |
| Manganese carbonate, chemical grade, 46% Mn, bgs., 20,000-lb lots and more, works | lb. | .11 | .16 |
| Manganese chloride, CP, anhyd., dms., 20,000-lb lots, works | lb. | .21¼ | — |
| smaller lots, works | lb. | .23½ | — |
| Manganese dioxide, African, 83-87%, 40,000 to 99,999-lb lots, burlap paper lined bgs., gross for net works | ton | 148.00 | — |
| 40,000 to 99,999-lb lots, paper bgs., same basis | ton | 144.50 | — |
| 40,000 to 99,999-lb lots, dms same basis | ton | 152.50 | — |
| Prices for manganese dioxide in 10,000 to 40,000-lb lots $3 per ton higher | | | |
| Manganese gluconate dms | lb | 1.84 | — |
| Manganese hydrate, dms., dlvd | lb | .35 | — |
| Manganese hypophosphite NF dms. | lb | 3.52 | — |
| Manganese linoleate liq. 4.35% Mn. dms | lb | .35¾ | — |
| Solid precip 8.2% Mn bbls | lb | 41¼ | — |
| Manganese metal, electrolytic, dms., c.l., dlvd E | lb. | .34½ | — |
| dms., ton lots, dlvd E | lb. | .37 | — |
| dms., smaller lots, dlvd E | lb. | .39 | — |
| Manganese naphthenate, liq. 6% Mn. dms. frt alld | lb | 29¾ | — |
| Manganese resinate, fused, 3½% Mn, dms | lb | 39¼ | — |
| Precip 6½ 7% Mn, dms | lb | .42 | — |
| Manganese sulfate, fertilizer grade, 65% $MnSO_4$, bgs., c.l. dlvd S E | ton | 88.50 | — |
| bgs. t.c.l. dlvd S. E | ton | 93.50 | — |
| Manganese tallate 6% dms | lb | 26½ | — |
| Manila copal gum, C, bgs | lb | .35 | .39 |
| DBB, bgs. | | | |
| DK, dust, bgs | lb | 14 | Nom. |
| MA, soft, bgs | lb | .20 | 24 |
| WS, bgs | lb. | No stocks. | |
| Mannitol, com'l fib dms., ton lots, works | lb. | .60 | — |
| fib dms., to ton lots, works | lb. | .62 | — |
| fib dms., single dm, works | lb | .65 | — |
| Marine pitch, dms | lb. | .04¼ | .05 |
| MBTS (see Mercaptobenzothiazyl disulfide) | | | |
| MBT (see 2-Mercaptobenzothiazole) | | | |
| Melamine, bgs., c.l., works | lb. | .26½ | — |
| bgs., l.c.l., works | lb. | .28 | — |
| Menadione, USP bots. | gram. | .044 | .05 |
| Menhaden oil, crude, tanks, works, Atl. & Gulf ports | lb. | .06½ | — |
| Menthol, nat USP, Brazilian large crystals, cs | lb. | 8.10 | — |
| Nat. USP Brazilian, regular crys., cs | | 8.00 | — |
| Japanese, cs | lb. | 10.50 | 12.00 |
| Syn., USP, racemic, 25-lb lots | lb | 4.25 | — |
| 2-Mercaptobenzothiazole, bgs., fib dms., ton lots works, frt. alld | lb. | .44 | — |
| bgs. fib dms. less ton lots, same | | .46 | — |
| Mercaptobenzothiazyl disulfide, bgs., fib dms., ton lots, works, frt. alld | lb. | .54 | — |
| bgs. fib dms. less ton lots, same basis | lb. | .56 | — |
| Mercuric chloride, NF, cryst, dms., 100 lbs. f.o.b. works | lb | 4.03 | — |
| USP, gran or powd., 20-lb dm., 100 lbs. f.o.b works | lb | 3.78 | — |
| Mercuric cyanide, NF VIII powd. fib dms | lb | 5.84 | — |
| Mercuric iodide red, NF 100-lb. dm f.o.b works | lb | 6.97 | — |
| Mercuric oxide red NF IX 50-lb dm 100 lbs. f.o.b works | lb | 4.72 | — |
| tech., 50-lb dm. 100 lbs. same basis | lb | 4.52 | — |
| yellow, NF, 50-lb. dm., 00 lbs., same basis | lb. | 4.89 | — |
| tech., dms. 100 lbs | lb | 4.35 | — |
| 25-lb fib dm | lb | 4.38 | — |
| Mercurous chloride (see Calomel) | | | |
| Mercurous iodide yellow NF 100-lb. dm f.o.b works | lb | 8.22 | — |
| Mercury, ammoniated (see White precipitate USP XV) | | | |
| Mercury metal 76 lbs per flask net-flask | | 206.00 | -209.00 |
| Mesityl oxide dms. c.l., dlvd | lb | .15 | — |
| dms. l.c.l., dlvd | lb | 16½ | — |
| tanks dlvd | lb | 12½ | — |
| Meta-aminophenol (see m-Aminophenol) | | | |
| Metachloroaniline (see m-Chloroaniline) | | | |
| Metanilic acid dms works | lb | .57 | .75 |
| Metanitroparatoluidine (see m-Nitro-toluidine) | | | |
| Metanitroaniline (see m-Nitroaniline) | | | |
| Metaphenylenediamine (see m-Phenylenediamine) | | | |
| Metatoluidine (see m-Toluidine) | | | |
| Metatolylenediamine (see 2,4-Tolylenediamine). | | | |
| Methacrylic acid glacial 98% dms. truckloads frt equald | lb | 42½ | — |
| dms. smaller lots frt equald. | lb | .43 | .75 |
| tanks works frt equald | lb | 40 | — |
| Methanol, nat, denaturing grade, tanks frt alld | gal | .85 | — |
| Syn. zone 1, dms., c.l., or t.l. min dlvd | gal. | .51½ | — |
| dms. l.c.l., dlvd | gal. | .61½ | — |
| tankwagon, 2,000-4,000 gal. lots, dlvd Metropolitan area | gal. | .35 | — |
| tankwagon, 4,000 gal min., dlvd | gal. | .30 | — |
| tankwagon, 4,000 gal min., f.o.b terminal | gal. | .29 | — |
| Methanol, syn., zone 2, dms. c.l. or t.l. min frt alld or dlvd. | gal. | .55½ | — |
| dms. l.c.l., works | gal. | .65½ | — |
| tankwagon, 2,000-4,000 gal. lots min., dlvd, Metropolitan area | gal. | .39 | — |
| tanks, 4,000 gal min. dlvd. | gal | .34 | — |
| Synthetic methanol zones are: Zone 1 is all continental US E. of eastern boundaries of Ariz., Idaho and Utah. Zone 2 is remainder of US west of above state boundaries comprising Ariz., Calif., Idaho, Nev., Ore., Utah and Wash. | | | |
| Methapyrilene fumarate, 100-999 lbs. dms., f.o.b works, frt equald | lb. | 21.75 | — |
| Methapyrilene hydrochloride 100-999 lbs., dms., f.o.b works, frt equald | lb. | 27.25 | — |
| Methenamine (see Hexamethylene-tetramine). | | | |
| Methionine hydroxyanalogue (calcium salt) 90% min., dms., t.l. frt alld | lb | 1.10 | — |
| dms., l.t.l., same basis | lb | 1.16 | — |
| dl-Methionine, fib dms., frt alld., 50-lb or more | lb | 3.50 | — |
| Feed grade 98% fib dms., same basis | lb | 1.43 | — |
| Methoxychlor 50% wettable powder, dealers, dms., cs | lb | .66 | — |
| Methyl abietate non-ret dms., c.l., dlvd zone 1 | lb | 21½ | — |
| non-ret dms. l.c.l. same basis | lb | 22 | 22¼ |
| Methyl abietate, hydrogenated non-ret dms., c.l. dlvd zone 1 | lb | 23½ | — |
| non-ret dms. l.c.l. same basis | lb | 24 | 24¼ |
| Zone 1 includes New England and Middle Atlantic states, Va., W. Va., N. C., Ohio, Ky., Mich., Ind., Ill., Wis., St. Paul and Minneapolis, Minn.; St. Louis, Mo.; Miss., Ala., Ga., Fla., S. C. and Tenn. | | | |


# WHAT'S NEWS IN ENJAY TECHNICAL SERVICE

## Fine vinyl finish at 10-18% less cost

Here is another example of Enjay customer service. Enjay has solved an important surface coating solvent problem by experimenting with various blends of methyl ethyl ketone with methyl isobutyl ketone for vinyl surface coatings. With a 50/50 blend of these Enjay solvents—users can obtain excellent surface hardness, gloss, and finish at a saving in cost per pound of solids dissolved, relative to 100% MIBK, of 10-18%. This is one more example of how Enjay is helping its customers turn out quality products at a saving.

Enjay is a convenient source of basic chemical raw materials for most industrial and chemical needs. Enjay will supply tank cars of MEK, MIBK or will split tank cars for your convenience. Contact Enjay at 15 West 51st St., N.Y. 19, N.Y.

ENJAY
PETROCHEMICALS

EXCITING NEW PRODUCTS THROUGH PETRO-CHEMISTRY

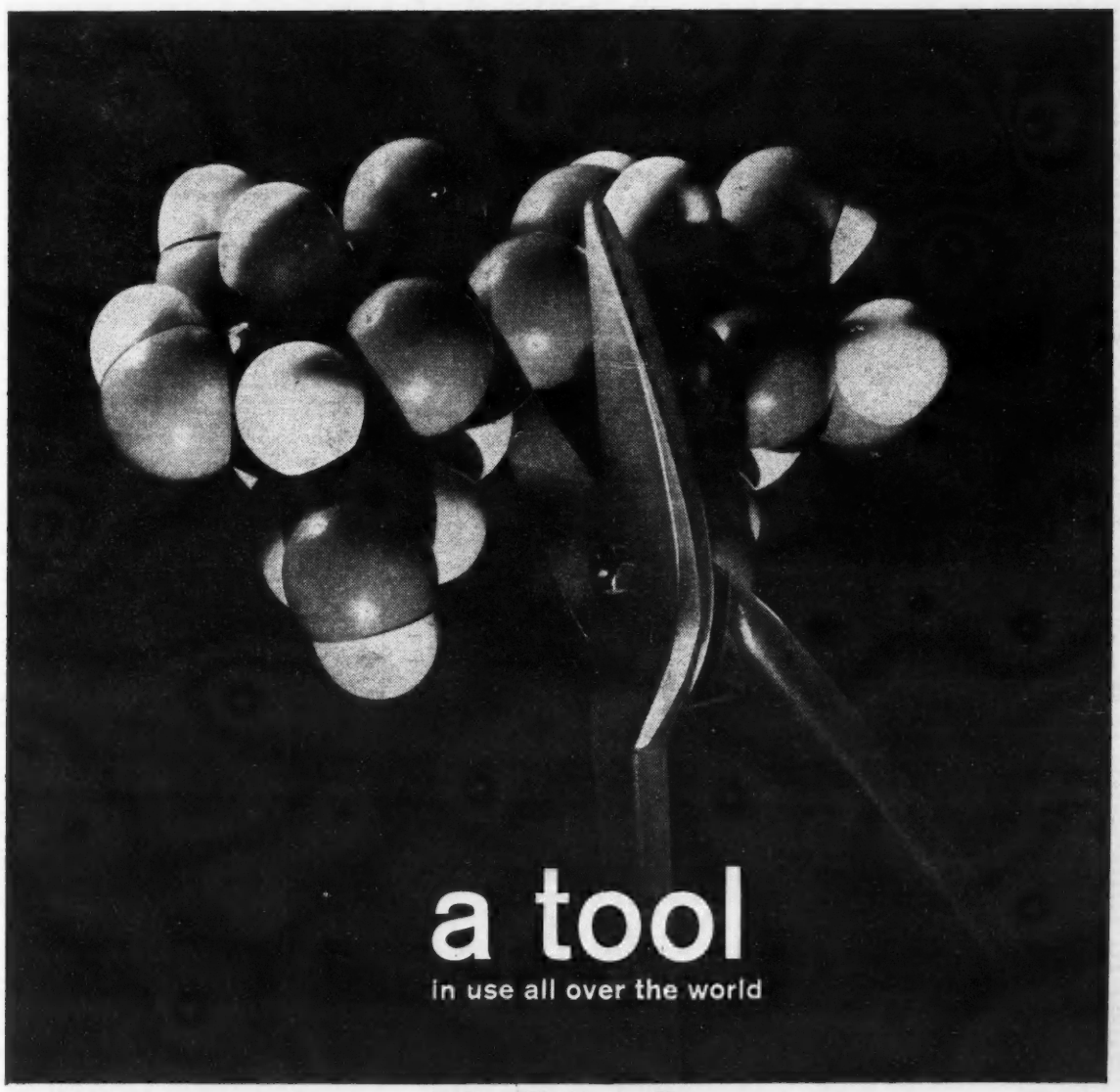
**ENJAY CHEMICAL COMPANY**

A DIVISION OF HUMBLE OIL & REFINING COMPANY

Methyl acetone, nat., dms., t.c.l., E of Miss. frt alld gal. 62½- —
Syn., dms., c.l., frt. alld. E. gal. .66 - —
dms., t.c.l., frt. alld. E. gal. .76 - —
tanks frt alld. E. gal. .51 —
Synthetic methyl acetone E territory comprises all states East of and including Colo., Mont., N. Mex. and Wyo. West territory is made up of all states west of those four.
Methyl acrylate, dms., c.l., t.l., divd. lb. .35¼- —
dms., t.t.l., divd. lb. .36¼- —
tanks, divd. lb. .32¼- —
Methyl alcohol (see Methanol).
Methyl amyl acetate, dms., c.l., divd. E lb. .17 - —
dms., t.c.l., divd. E. lb. .18½- —
tanks, divd. E. lb. .14½- —
Methyl amyl alcohol, dms., c.l., divd. lb. .17 —
dms., t.c.l., divd. lb. .18½- —
tanks, divd. lb. .14½- —
Methyl amyl ketone, dms., c.l., t.l., f.o.b. works lb. 1.99¼- —
dms., t.c.l., same basis lb. 2.00 - —
N-Methylaniline, tech., tanks, frt. alld lb. .60 —
Methylanthranilate, cns. lb. 2.25 2.45
Methyl benzoate, cns., dms. lb. .60 .75
Methyl bromide, service organization prices, 40 to 375-lb. cyls., large lots, frt. alld lb. .62 - .72
on 100 lbs lb. .73 - .79
Methyl cellulose, special vis., (1,500-4,000 cps.) 50-lb bgs., c.l., works lb. .82 - —
50-lb bgs., 2,000-lb. lots and more, same basis lb. .89 - —
50-lb bgs., smaller lots, frt. alld on 100 lbs lb. 1.05 - —
Methyl cellulose, standard vis. (15,-400 cps.) 50-lb. bgs., c.l., frt. alld lb. .69 - —
50-lb bgs. 2,000-lb lots and more, same basis lb. .76 - —
50-lb. bgs., smaller lots, frt. alld.
Methyl chloride, indust. cyls., frt. equald lb. .22¼- —
tanks, multi-unit, same basis. lb. .16¼- —
tanks, single unit, same basis. lb. .12¾- —
Methyl chloride, refrigerator mfrs., cyls., divd lb. .48¾- —
Other consumers or service men, cyls., divd lb. .67¾ —
Methyl chloroform (see 1,1,1-Trichloroethane).
Methyl cinnamate, cns. lb. 1.55 1.80
Methyl ethyl ketone, dms., c.l., divd lb. .15 - —
dms., t.c.l., divd. lb. .16½- —
tanks, divd. lb. .12½- —
2-Methyl-5-ethyl pyridine, dms., c.l., works lb. .45 - —
dms., t.c.l., works lb. .45¾- —
tanks, works lb. .43 - —
Methyl formate, refd., dms lb. .35 - .40
Tech., non-ret. dms., any quantity, works lb. .10 - —
tanks, works lb. .07 - —
a-D Methyl glucoside, tech., 100-lb. multiwall paper bgs., c.l., works lb. .25 - —
100-lb. multiwall paper bgs., t.l., min 23,000 lbs., works. lb. .27 - —
100-lb multiwall paper bgs., t.t.l., works lb. .28 - —
Methyl heptin carbonate, bots lb. 27.75 - 31.00
Methyl p-hydroxybenzoate, 6b dms. lb. 1.90 2.00
Methyl ionone, standard, cns., dms. lb. 3.40 - 3.85
Methyl isoamyl ketone, dms., c.l., divd lb. .20 - —
dms., t.c.l., divd. lb. .20½- —
tanks, divd. lb. .17½- —
Methyl isobutyl carbinol (see Methyl amyl alcohol).
Methyl isobutyl ketone, dms., c.l., divd lb. .17 - —
dms., t.c.l., divd lb. .18½- —
tanks, divd lb. .14½- —
Methyl methacrylate, dms., c.l., t.l., frt equald, with Belle, W. Va lb. .31 - —
dms., smaller lots, same basis lb. .31½- —
tanks, same basis lb. .29 - —
Methyl naphthyl ketone, cryst., cns lb. 2.45 - 4.30
Methyl parahydroxybenzoate (see p-Hydroxybenzoate).
Methyl parathion, tech., 80%, dms., frt. alld. E lb. .84 - —
Methyl parathion prices 2c. per lb. higher in West.
Methyl roseaniline chloride, NF., 5-lb. fib. dms lb. 6.90 - —
Methyl salicylate, dms., t.l., frt. alld lb. .60¼- —
dms., t.c.l., same basis lb. .62½- .67½
Methyl testosterone, USP, 100-gram bots gram. No Prices.
2-Methyl-5-vinyl pyridine, 40-dm. lots or more, f.o.b. works lb. 1.32 - —
5-39 dm. lots, same basis lb. 1.37 - —
tanks, same basis lb. 1.27 - —
Methyl violet toner, molybdated, PMA bbls., divd. E. of Rockies lb. 2.93 - —
Tungstated, PTMA, bbls., same basis lb 4.35 - —
Methyl violet prices 1c higher W. of Rockies
Methylene blue, fib. dms., 100-lb. lots, frt. adjusted lb. 4.67 - —
Methylene chloride, tech., straight or assorted, dms., c.l., or t.l., divd lb. .12¼- —
dms. t.c.l., t.t.l., divd lb. .15¾- —
tanks, 4,000-gal. min., divd lb. .11¼- —
b-Methylnaphthalene, 32°C., m.p., dms., works lb .90 - —
Methylpentanediol (see Hexylene glycol).
Methylphenylpyrazolone (see 1-phenyl-3-methyl-pyrazolone-5).
Methylthionine chloride (see Methylene blue).
Mica, dry-grd. paint, plastic, 100 mesh, bgs., c.l., works lb. .04 - —
roofing, 20 to 80 mesh, works lb. .03 - —
wet-grd., biotite, bgs., c.l., works, frt. alld. E lb. .06¼- —
bgs. t.c.l., ex-whse. lb. .07¼- —
paint or lacq., bgs., c.l., 325 mesh, works, frt. alld. E. lb. .08¼- —
bgs. t.c.l., ex-whse or freight alld. E lb. .09 - —
Mica, wet-grd., rubber, bgs., c.l., works, frt. alld. E lb. .08 - —
bgs. t.c.l., ex-whse, or frt. alld. E lb. .08¾- —
wallpaper, bgs., c.l., works, frt. alld. E lb. .08¾- —
bgs., ex-whse or frt. alld E. lb. .09 - —
white, 5-10 microns, bgs., c.l., works, frt. alld. E. lb. .08¼- —
Mica, wet-grd. W. of Miss. ½c. higher; W. of Rockies 1c higher.
Microcrystalline wax, petroleum, coating grades, tankcars, works lb. .10 - .11
laminating grades, tankcars, works lb. .11 - .13
Mineral black, bgs., works lb. .0160- .0673
Mineral oil, white tech., 50-63 vis., non-ret. dms., c.l., f.o.b. refy gal. .70 - —
non-ret. dms., t.c.l., same basis gal. .75 - —
tankcars, refy. gal. .54 - —
65-75 vis., non-ret. dms., c.l., same basis gal. .70½- —
non-ret. dms., t.c.l., same basis gal. .75½- —
tankcars, refy. gal. .54½- —
NF, 80-90% vis., non-ret. dms., c.l., same basis gal. .71 - —
non-ret. dms., t.c.l., same basis gal. .76 - —
tankcars, refy. gal. .55 - —
135-138 vis., non-ret. dms., c.l., same basis gal. .77 - —
non-ret. dms., t.c.l., same basis gal. .82 - —
tankcars, refy. gal. .61 - —
145-153 vis., non-ret. dms., c.l., same basis gal. .83 - —
non-ret. dms., t.c.l., same basis gal. .88 - —
tankcars, refy. gal. .67 - —
USP, 180-190 vis., non-ret. dms., c.l., same basis gal. .83 - —
non-ret. dms., t.c.l., same basis gal. .90 - —
tankcars, same basis gal. .69 - —
200-210 vis., non-ret. dms., c.l., f.o.b. refy gal. .875 - .90
non-ret. dms., t.c.l., same basis gal. .925 - —
tankcars, refy. gal. .69 - .715
340-350 vis., non-ret. dms., c.l., f.o.b. refy gal. .82½- —
non-ret. dms., t.c.l. gal. .97½- —
tankcars, refy. gal. .76½- —
(For divd. N.Y. prices add 2c. for c.l. and 3c. for t.c.l.).

Mineral orange, American, bbls., c.l., works lb. .16 - —
bbls., t.c.l., same basis lb. .17 - —
Mineral spirits, petroleum, odorless, tankcars, New Jersey gal. .29 - —
New York gal. .305 - —
Houston, Texas gal. .25 - —
regular, tankcars, New Jersey and New York gal. .18 - —
Group 3 gal. .12875- —
Houston, Texas gal. .145 - —
Mineral spirits, 140 F, flash, New York, New Jersey at terminal gal. .205 - —
Houston, Texas gal. .17 - —
Mink oil, dms. lb. 2.75 - —
Mirbane oil (see Nitrobenzene).
MNPT maroon toner, kgs., c.l., works lb. 6.30 - —
Molasses, blackstrap, feed grade, tanks, New Orleans gal. .13 - .13½
tanks, New York gal. .15½- .16
Molybdated orange, bbls. lb. .49 - —
Molybdenum metal, powd., 80 or 200 mesh, ctns., works kilo. 7.84 - —
325 mesh, ctns., works kilo. 9.13 - —
Molybdenum trioxide, purif., dms., works lb. 1.15 - —
Tech., chemical, dms., works, basis Mo content lb. 1.48 - —
Tech., metallurgical, dms., works, basis Mo. content lb. 1.47 - —
Molybdic acid, 84%, dms., works. lb. 1.05 - 1.15

Monoallylamine, dms., c.l., divd lb .965 —
dms., c.l., divd. lb .995 - —
tanks, divd. lb. .96 - —
Monobutylamine, dms., c.l., divd. E. of Rockies lb. .57½- —
dms., t.c.l., same basis lb. .59 —
tanks, same basis lb. .55 —
Mono-tert-butyl-m-cresol, dms., c.l., works lb .55 —
dms., t.c.l., works lb .56 - —
tanks, works lb. .54 —
Monochloracetic acid, purif. (see Chloroacetic acid mono).
Monochlorobenzene, dms., c.l., frt. alld or divd. E lb. .10½- —
dms., t.c.l., same basis lb. .11½ —
tanks, same basis lb. .08¾ —
Monochlorobenzene prices in the West 1¾c. higher.
Monoethanolamine, dms. c.l., divd. E lb. .27½- —
dms., t.c.l., same basis lb. .29 —
tanks, same basis lb. .25 —
Monoethylaniline (see N-Ethylaniline).
Monoethylamine, 70% aqueous, solution, dms., c.l., divd. E. 100% basis lb. .38½- —
dms., t.c.l., divd. E., 100% basis. lb. .40 —
tanks, divd. E., 100% basis lb. .35 - —
Monoethylaniline (see N-Ethylaniline).
Monoethylorthotoluidine (see N-Ethyl-o-toluidine).

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## Monoisopropanolamine—Phenyl Salicylate

Monoisopropanolamine, dms., c.l., dlvd. E.. lb. .27½- —
dms., l.c.l., same basis..... lb. .29 - —
tanks, same basis ..... lb. .28 - —
Monoisopropylamine, anhyd., dms., c.l., dlvd lb. .33½- —
dms., l.c.l., same basis..... lb. .35 - —
tanks, same basis..... lb. .31 - —
Monomethylamine, anhyd., cyls., l.c.l., frt. equald., 100% basis lb. .30 - —
tanks, 100% basis..... lb. .26 - —
30-35% soln., dms., c.l., frt. equald., 100% basis lb. .26 - —
Monomethylamine, 30-35% soln., dms., l.c.l., frt equald, 100% basis lb. .36½- —
tanks, frt. equald., 100% basis, lb. .26 - —
40% soln., dms., frt. equald., 100% basis lb. .33 - —
dms., l.c.l., frt. equald., 100% basis lb. .33½- —
tanks, frt. equald, 100% basis.lb. .26 - —
Monopentaerythritol, tech., bgs., c.l., dlvd. E lb. .31 - —
bgs., l.c.l., dlvd. E lb. .32 - —
Monopotassium glutamate, dms., 1,000-lb lots, frt alld lb 3.05 - —
dms., 100-lb lots, same basis lb 3.25 - —
Monosodium glutamate, dms., dlvd, lb. 1.07 - 1.15
Monosodium phosphate (see sodium phosphate, monobasic)
Montan wax, Calif., refd., bgs lb .27 - .28
Imp., crude, Bohemian, bgs.... lb. .25 - .26
German, bgs. ..... lb. .25 - .26
Morphine, cns., 100-oz., f.o.b. works, oz 12.35 - —
Morphine hydrobromide, cns., 100-oz., f.o.b works oz 9.90 - —
Morphine hydrochloride, NF, cns., 100-oz., f.o.b works oz. 9.90 - —
Morphine sulfate, USP, cns., 100-oz., f.o.b works oz 9.90 - —
Morpholine, dms., c.l., dlvd. E lb. .55¼- —
dms., l.c.l., dlvd. E ..... lb. .56¾- —
tanks, dlvd E ..... lb. .52¾- —
Muriatic acid (see Hydrochloric acid).
Musk, syn., ambrette, fib dms., 100-lb lots lb 4.40 4.90
cns., 25-lb lots lb 4.50 5.00
Ketone fib. dms., 100-lb lots lb 4.60 5.10
cns., 25-lb lots lb 4.70 5.20
Xylol, fib. dms., 100-lb lots lb 1.26 —
cns. 25-lb lots lb 1.40 —
Mustard seed, Danish, yellow, bgs. lb. .10 - —
Montana, yellow, bgs ..... lb. .10½- —
Oriental, bgs..... lb. .09 - —
Mustard oil, syn., bots..... lb 1.60 1.85
Myristic acid, bgs..... lb. .23¼- .25¾
tanks ..... lb. .22¼- —
Myrrh gum, cs..... lb. .65 .75

## N

Naphtha, high solvency (see Solvent naphtha, petroleum).
Naphtha, petroleum, cleaner's (see Cleaner's naphtha)
Naphtha, VM&P, petroleum, tank-cars, New Jersey and New York ..... gal. .19 - —
Group 3 ..... gal. .13875- —
Houston, Texas ..... gal. .155 —
Naphthalene, crude, dom., 78°, tanks, frt. equald lb. .06¼- .06½
Refd., indust., chipped, crushed, bgs., frt. equald lb. .14½- —
tanks, same basis ..... lb. .11¾- —
Naphthalene, refd., indust., balls, flakes, wholesalers, jobbers, bbls., c.l. same basis, lb. .15½- —
cs., 50 lbs. c.l. same basis, lb. .15¾- —
1-lb pkgs. c.l. same basis, lb .18½- —
a-Naphthol, dms., frt. alld lb 1.02 —
b-Naphthol, tech., flake bbls., c.l., works lb. .34 - —
bbls. l.c.l. works lb .36 - —
Naphthol, ITR, red toner, bbls., works lb 5.00 - —
1-Naphthol-3,6-disulfonic 8-amino acid (see H acid)
1-Naphthol-4 sulfonic acid (see Neville and Winther's acid)
1-Naphthol-5-sulfonic acid (see L acid)
1-Naphthol-5-sulfonic 8-amino acid (see S acid)
2-Naphthol-6,8-disulfonic acid (see Gamma acid).
Naphthol sulfonic mixed acid (see Cleve's acid)
a-Naphthylamine, dms., frt. alld lb. .53 - —
b-Naphthylamine, tech., flake, bbls., works lb. 1.60 - —
1-Naphthylamine-5-sulfonic acid (see Laurent's acid)
2-Naphthylamine-4,8-disulfonic acid (see Cassella acid).
2-Naphthylamine-1-sulfonic acid (see Tobias acid).
2-Naphthylamine-6-sulfonic acid (see Broenner's acid)
2-Naphthylamine-7-sulfonic acid (see F acid).
Naringin, fib dms. lb 8.50 —
Neatsfoot oil, 15° cold test, dms lb 29 Nom.
20° cold test, dms. lb. 28 Nom.
30° cold test, dms. lb. .27 Nom.
Neocinchophen, USP, dms., frt, adjusted lb 7.00 8.00
Neomycin sulfate, fib dms, 1-kilo basis activity gram. .35 —
fib. dms. 100-999-gram lots, basis activity gram. .30 - —
Tech., fib dms gram .13½- —
Neopentylglycol, dms., c.l., dlvd lb. .32 - —
dms., l.c.l., same basis lb .33 - —
Neroi, dms. lb 4.75 —
Neroli oil, NF, French, bots..... lb 425.00 575 00
Tunisian, bots. lb 400.00 —
Nerolin, cns. lb 2.45 2.85
Neville and Winther's acid, dms., frt. alld lb. 1.50 - —
Niacinamide (see Nicotinamide).
Nickel acetate, bbls. dlvd lb. .68½- .75½
Nickel carbonate, bbls., dlvd lb .78¼- .85¼
Nickel chloride, bbls. dlvd lb .37 .45
Nickel formate, bbls., ton lots, frt. alld lb. 72 73
Nickel metal, electro cathodes, cs., works lb 74 —
Nickel nitrate, dms. frt alld lb .31½- .33½
Nickel oxide, black, bbls. lb. .85 —
Green, bbls ..... lb. .84 - —
Nickel sulfate, bgs., c.l., dlvd lb. .28 —
bgs., l.c.l., dlvd. lb .28½- 36
Nicotinamide, USP, 50-kilo, dms., 100 kilos., dlvd kilo. 5.75 6.50
dms. less than 100 kilos. dlvd. kilo. 6.25 7.00
Nicotinamide hydrochloride, 50 kilo dms., dlvd kilo. 6.50 7.50
Nicotine sulfate 40%, dealers, 50-lb. dms frt alld lb 1.20 —
40% manufacturers, 500-lb. dms., frt. alld lb 1.05 - —
Nicotinic amide, USP (see Nicotinamide).
Niger seed, bgs. ..... lb. .10¼- —
Nikethamide, cbys. ..... lb. 5.00 - —
Nitric acid, 36° Be., cbys., c.l., works E 100 lbs. 5.75 - —
cbys., l.c.l., works E 100 lbs. 6.05 - 6.85
38° Be., cbys., c.l., works E. 100 lbs. 6.25 —
cbys., l.c.l., works E 100 lbs. 6.55 7.35
40° Be., cbys., c.l., works E 100 lbs. 6.75 - —
cbys., l.c.l., works E 100 lbs. 7.05 7.85
42° Be., cbys., c.l., works E. 100 lbs. 7.25 —
cbys., l.c.l., works E 100 lbs. 7.55 8.35
56.5 to 68% $HNO_3$, tanks, works, 100% basis 100 lbs. 3.90 - —
94½ to 95½% $HNO_3$, tanks, works, 100% basis 100 lbs. 4.90 - —
Nitric acid, CP, NF, consumer, cbys., extra, c.l., works lb. .18½- —
cbys. extra, l.c.l. works lb. .20 - —
5-pint bots., extra, cs., c.l., same basis lb. .22½- —
5-pint bots. extra, cs., l.c.l., same basis lb. .24 - .25
dms., frt alld lb. .99 - —
4-Nitro-2-aminophenol, tech., paste, dms., l.c.l., works lb. .64 - —
m-Nitroaniline, cryst., dms., frt. alld lb 1.15 - —
Paste, dms., frt. alld., 100% basis. 1.10 - —
o-Nitroaniline, flaked, dms., t.l., frt. alld lb. .49 - —
dms., t.l., frt alld ..... lb. .51 - —
o-Nitroaniline orange toner, bgs. lb. 1.50 - —
p-Nitroaniline, c.l., t.l., dms., 20,000 lb. min., dlvd lb. .44½- —
dms., l.c.l., same basis lb. .46½- —
o-Nitroanisole, tech., tanks, frt alld. lb. .36 - —
p-Nitroanisole, tech., solid, dms., frt alld lb. .73 - —
Nitrobenzene, dbl dist., dms., c.l., frt alld lb. .13 —
dms., l.c.l., frt. alld. lb .14 - —
tanks, frt. alld. lb. .11 - —
p-Nitrobenzoic acid, dms., c.l., works lb. .63 - —
Nitrocellulose, ester-soluble, 30-35 cps., ¼, ½, ¾, 5-6, 15-20, 30-40, 60-80, 125-175 seconds, bbls., c.l., works lb. .37½- —
bbls., l.c.l., same basis lb .33½- .40½
18-20 cps., bbls., c.l., same basis lb. .39½- —
bbls., l.c.l., same basis lb. 40½- .42½
250-400, 600-1,000 seconds, bbls., l.c.l. same basis lb. .43 .46
Nitrocellulose, spirit soluble, 30-35 cps, ¼, ½ seconds, bbls., c.l. same basis lb. .43 - —
bbls., l.c.l., same basis lb 44 .46
5-6 cps., 40-60 seconds, bbls., c.l. same basis lb. .42 —
bbls. l.c.l., same basis lb .43 .45
Denatured alcohol used in the manufacture of nitrocellulose is charged extra. Drums extra but returnable
o-Nitrochlorobenzene, dms., c.l., frt. alld lb .15 - —
dms., l.c.l., same basis lb .16 - —
tanks, same basis lb .13 - —
p-Nitrochlorobenzene, dms. lb .26 .27
2-Nitro-p-cresol, tech., dms., dlvd lb .88 —
Nitroethane, dms., c.l. dlvd. E lb .25 —
dms., l.c.l., dlvd E ..... lb 26½- —
tanks dlvd E ..... lb 22½ —
Nitroethane prices West of Rockies are 1c. higher
Nitrogen solutions, direct application, tanks, f.o.b. works unit-ton. 1.64 - —
Manufacturing type, same basis, unit-ton 1.32 - —
Nitrogen tetroxide, indust., tankcars, f.o.b Hopewell, Va lb. .065 - —
Cyls. t.l., min 5 tons, same basis lb. .07½- —
Cyls. l.c.l. t.l., same basis lb. .15 - —
Nitrogenous process tankage, bulk, works unit-ton 4.50 5.00
Nitrogenous sewage sludge, bulk, f.o.b Chicago works, unit-ton 3.50 —
(The foregoing price is per unit $NH_3$, plus 50c. per unit a.p.a., bulk, f.o.b producers works, Chicago.)
Nitromethane, dms. t.l., dlvd. E lb .25 —
dms. l.t.l. dlvd E ..... lb .26½ —
Nitromethane prices West of Rockies are 1c higher
a-Nitronaphthalene, bbls. frt. alld. lb. .31 - —
o-Nitrophenol, dms., works, frt. equald lb. .94 - —
p-Nitrophenol, dms., c.l., frt alld. lb .45 - —
dms. l.c.l. frt alld lb .47 - —
1-Nitropropane, dms., c.l., frt. alld. E of Rockies lb. .23½- —
dms., l.c.l., same basis lb. .25 —
tanks, same basis lb .21 —
2-Nitropropane, dms., c.l., frt. alld. E of Rockies lb .18½- —
dms, l.c.l., same basis lb. .20 —
tanks, same basis lb .16 —
Nitropropane prices West of Rockies are 1c. per lb higher
m-Nitrotoluene, tech., dms., frt. alld. lb. .50 - —
o-Nitrotoluene, dms., c.l., frt. alld lb .15 - —
dms, l.c.l., frt alld. lb .16 - —
tanks, frt alld lb .13 - —
p-Nitrotoluene, tech., cast, dms., c.l., works lb. .27½- —
dms, l.c.l, works lb. .28 - —
flake, dms., c.l., t.l., works lb. .27½- —
dms, l.c.l, works lb .28 - —
m-Nitro-p-toluidine, dms. lb. 1.25 —
Nonylphenol, dms, c.l, frt. alld lb. .22½- —
dms., l.c.l., frt. alld..... lb. .23½- —
tanks, frt. alld ..... lb. .20 —
Nonylphenol prices on shipments to Western States are 2c. higher.
Noscapine, cns. ..... oz. 2.00 - —
Nutmegs, East Indian, whole, bgs lb. 1.18 - —
West Indian, bgs ..... lb. 1.20 - —
Nutmeg oil, USP dist., East Indian, cns lb 9.00 12.00
West Indian, cns. ..... lb 9.00 12.00
Nux vomica, bls. ..... lb. .20 —
Powd., bbls, bxs. ..... lb. .20 .22

## O

Ocher (see Iron oxide, yellow, nat.)
Ocotea cymbarum oil, dms. ..... lb. .45 - .47
Octane, indust., tanks, Bayonne, N.J gal. .20 —
1-Octanol, tech., dms, c.l., dlvd., Zone 1 lb. .43½- —
dms., l.c.l., dlvd. Zone 1.... lb. .45½- —
tanks, dlvd., Zone 1 lb. 41 —
Octyl alcohol, perfumers grade, bots, lb. 1.60 - 2.35
Octyl alcohol, tech, (see 1-Octanol, tech).
tert-Octylamine, dms., c.l., t.l., f.o.b. works lb. .54½- —
dms., l.c.l. same basis lb. .55 - —
Octylphenol, bgs., c.l., works.. lb. .22½- —
bgs., l.c.l., works ..... lb. .23 - —
tanks, works ..... lb .21½- —
Octylphenol in dms., 11c. higher.

### OILS

**Oil quotations are listed individually. For example, prices on Oil, coconut, may be found in the C's under Coconut oil.**

Oiticica oil, liq., dms..... lb. .15½- .16
tanks ..... lb. .14 - .14½
Oleic acid, dbl.-dist. (white), dms. lb. .19 - .21½
tanks ..... lb. .16½- —
S. D., dms..... lb. .18 - .20½
tanks ..... lb. .15½- —
Oleum (see Sulfuric acid, fuming).
Olibanum gum, siftings, cs..... lb. .15 - .20
Tears, cs. ..... lb. .22 - .30
Olibanum oil, bots..... lb. 5.00 7.65
Extra fine, bots..... lb. 8.00 9.50
Olive oil, edible, dms., spot, duty-paid gal. 2.35 - 2.40
Olivine, crude, works..... ton. 12.00 - —
20 mesh, works..... ton. 15.00 - —
100 mesh works ..... ton. 20.00 - —
Opium, USP, cns., 25-lbs., f.o.b. works oz. 19.20 - —
gran., cns., 50 lbs., same basis. oz. 21.65 - —
powd., cns. 50 lbs. same basis, oz. 21.65 - —
Orange oil, expressed, USP, Calif., cns., dms lb. .70 - .90
Calif., sweet., cns., dms ..... lb. .60 - —
Florida, cns., dms ..... lb .40 .45
Messina, cns. ..... lb. 3.25 5.00
West Indian, bitter, cns., dms. lb. 2.50 - 3.50
Orange peel, bitter, Haitian, bls lb. .18 .20
Sweet lb. .28 .30

### ORANGE PIGMENTS

**Orange pigment quotations are listed individually. For example, prices on Orange, chrome, may be found in the C's under Chrome orange.**

Origanum oil, Spanish, cns..... lb. 1.80 2.30
Orris root, Florentine, bls..... lb. .55 - —
powd., bbls., bxs ..... lb. .65 - —
Verona, bls. ..... lb. .35 - —
powd. bbls. bxs ..... lb. .45 - —
Orthoanisidine (see o-Anisidine).
Orthochlorobenzaldehyde (see o-Chlorobenzaldehyde)
Orthochloroaniline (see o-Chloroaniline).
Orthochlorobenzoic acid (see o-Chlorobenzoic acid)
Orthochloroparanitroaniline (see 2-Chloro-4-nitroaniline).
Orthochlorophenol (see o-Chlorophenol).
Orthocresol (see o-Cresol)
Orthocresotinic acid (see 2,3-Creosotic acid).
Orthodichlorobenzene (see o-Dichlorobenzene).
Orthonitroaniline (see o-Nitroaniline).
Orthonitrochlorobenzene (see o-Nitrochlorobenzene).
Orthonitroparachlorophenol (see 2-Nitro-4-Chlorophenol).
Orthonitrophenol (see o-Nitrophenol).
Orthonitrotoluene (see o-Nitrotoluene).
Orthophenetidine (see o-Pheretidine)
Orthophenylphenol (see o-Phenyl phenol).
Ortho-tertiary amylphenol (see o-tert-Amylphenol)
Orthotolidine (see o-Tolidine base)
Orthotoluidine (see o-Toluidine).
Ouabain, USP bots gram 3.00 4.00
Ouricury wax, crude, bgs. ..... lb. .52 Nom.
Refd., pure, bgs ..... lb. .57 - .58
Oxalic acid, bgs., c.l., works lb. .18 - —
bgs., 10,000-lb. lots, works .. lb. .19 - —
bgs., smaller lots, works ..... lb. .20½- —
Oxalic acid in drums is priced ½c. per lb higher.
8-Oxynaphthoic acid, pigment manufacture, dms., frt alld lb. .912 - —
Dyestuff manufacture, dms., same basis lb. 1.03 - 1.14
Oxyquinolin sulfate, cns., 100-lb. lots, works lb. 4.75 5.00
cns., smaller lots, works ... lb. 4.93 - 5.17

## P

Palm oil, clarif., dms..... lb. .14¾- .15¾
tanks ..... lb. .12 - —
Palm oil acid, double dist, dms. lb. .16 - .18½
tanks ..... lb. .13½- —
single dist., dms..... lb. .15½- .18
tanks ..... lb. .13 - —
Palmarosa oil, cns ..... lb. 4.90 - 6.00
Papain, powd., bots. ..... lb. 3.25 -10.00
Papaverine hydrochloride, nat. or syn., USP, cns., 25-oz. to 100-oz. lots oz. 5.00 - —
cns., smaller lots oz. 5.05 - 5.20
Papaverine sulfate, nat. or syn., USP, cns oz. 7.10 - 7.35
Paprika, Bulgarian, bgs..... lb. .32 - —
Hungarian, bgs. ..... lb. .33 - —
Spanish, bgs ..... lb. .30 - —
Yugoslavian, bgs. ..... lb. .38 - —
Para-aminobenzoic acid (see p-Aminobenzoic acid).
Parachlorobenzoic acid (see p-Chlorobenzoic acid)
Paramethylphenylcinchonic acid (see Neocinchophen).
Paranitrobenzoic acid (see p-Nitrobenzoic acid).
Paratoluidinemetasulfonic acid (see p-Toluidine-m-sulfonic acid).
Para-aminophenol (see p-Aminophenol).
Parachlorophenol (see p-Chlorophenol).
Parachloro-orthonitroaniline (see 4-Chloro-2 nitroaniline).
Para-anisidin (see p-Ansidine)
Parachloraniline (see p-Chloraniline).
Parachlorobenzaldehyde (see p-Chlorobenzaldehyde).
Paracresol (see p-Cresol)
Paradibromobenzene (see p-Dibromobenzene).
Paradichlorobenzene (see p-Dichlorobenzene).
Para toner, red, bbls ..... lb. 1.30 - —
Chlorinated, kgs. ..... lb. 1.41 - —
Paraffin, crude, scale, white, 123°-127°F., ASTM, tanks, refy. lb. .0655- .0660
fully refd., 122°-124°F., ASTM, lb. .0765- —
125°-127°F., ASTM, tanks, refy. lb. .0765- —
130°-132°F., ASTM, tanks, refy. lb. .0765- —
132°-134° F., ASTM, tanks, refy. lb. .0765- —
135°-137°F., ASTM tanks, refy. lb. .0765- —
AMP temperatures are an arbitrary 3°F higher than ASTM.
Paraffin oil, pale, 100-110 vis., at 100°F., tanks east coast refy gal. .14 - —
Paraffin wax (see Paraffin)
Paraformaldehyde 91% flake, bgs., c.l., frt alld lb. .10 - —
bgs., l.c.l., frt alld lb. .12 - .13
91%, powd., bgs., c.l., ex whse. lb. .1715- —
bgs., l.c.l., ex whse ..... lb. .1865- —
Paraformaldehyde, USP-X, fib. dms., c.l. lb. .19 - —
fib. dms., 1,000-lb. lots .... lb. .20 - —
fib. dms., smaller lots ..... lb. .21½- —
Paraldehyde, tech., 98%, 55-gal. dms., t.l., dlvd. E .. lb. .14 - —
55-gal. dms., l.c.l., dlvd. E. lb. .15½- —
tanks, dlvd. E..... lb. .11½- —
Paranitroaniline (see p-Nitroaniline).
Paranitrochlorobenzene (see p-Nitrochlorobenzene).
Paranitrotoluene (see p-Nitrotoluene).
Paranitrophenol (see p-Nitrophenol).
Paraphenetidine (see p-Phenetidine).
Paraphenylenediamine (see p-Phenylenediamine).
Paraphenylphenol (see p-Phenylphenol).
Para-tertiary-amylphenol (see p-tert-Amylphenol).
Para-tertiary butylphenol (see p-tert-Butylphenol).
Parathion ethyl, dms. frt. alld lb. .84 —
Parathion prices 2c. per lb. higher in West.
Paratoluenesulfonamide (see p-Toluenesulfonamide).
Passion flower herb, bls..... lb. .35 .40
Patchouli oil, imp., cns. ..... lb. 5.60 6.50
Peach kernel oil, USP (see Apricot kernel oil).
Peacock blue, fugitive, 100% color strength, 250-lb. bbls., dlvd E of Rockies lb. 1.00 —
Peacock blue price 1c higher W of Rockies.
Peanut meal, old process 45%, bgs., f.o.b. mills..ton. 57.00 - —
solvent, same basis.....ton. 54.00 - —
Peanut oil crude, tanks, f.o.b. mills lb. .15 - —
Refd., dms. ..... lb. .20¼- .20½
tanks ..... lb. .18¼- —
Pectin, dom., NF, citrus, powd., 100 kilos, f.o.b. shipt pt kilo. 4.52 —
Pelargonic acid, dms., c.l., dlvd. E lb. .27½- —
ton lots, same basis ..... lb. .28½- —
tanks, same basis ..... lb. .25 - —
Penicillin potassium, cryst., bulk, 1,000,000 units.. .018 - —
Penicillin procaine, cryst., bulk, 1,000,000 units. .020 - —
Pennyroyal oil USP imported, cns. lb. 1.95 2.70
Pentachlorophenol, 50-lb. bgs., c.l., t.l., works, frt. equald lb. .21 - —
bgs., less than ton-lots, same basis. lb. .29 - —
bgs., c.l., t.l., 2,000 lb. minimum, same basis lb. .22½- —
Pentachlorophenol in dms 1c. higher
Pentaerythritol tech., bgs., c.l., dlvd lb .31 —
bgs. l.c.l., dlvd lb .32 —
Pentaerythritol, di- and tri-isomers (see Dipentaerythritol and Tripentaerythritol).
Pentane, indust., tanks, f.ex refy. gal. .14 —
Pentobarbital, dms. 100 lbs. or more lb. 6.00 —
Pepper, black, Malabar, bgs ..... lb. .47 - —
Lampong, bgs. ..... lb. .47 - —
Red, Funtuas bgs. ..... lb. .32 —
Japanese, Hontoka, bgs. ... lb .37½- —
Santaka, bgs. ..... lb. .31½- —
Sudanese, bgs. ..... lb. .36 - —
White, Muntok, bgs ..... lb. .65 - —
Peppermint leaves, dom., USP, bls., dms lb. No stocks.
imp., USP, dms. ..... lb. .85 .90
Peppermint oil, nat., dms..... lb. 4.40 - —
Redist., USP, dms. ..... lb. 4.65 - —
Perchloroethylene, dms. c.l., or t.l., dlvd lb. .13½- —
dms., t.c.l., dlvd. lb. .15¼- —
tanks, dlvd. lb. .11¾- —
tanktruck, 1,000 gal. min. dlvd lb .12¼- —
Peri acid, dry bbls., frt alld lb. 1.60 —
Paste, bbls. frt alld lb. 1.55 —
Peru balsam, dms lb. 1.15 - 1.50
Persic oil, USP (see Apricot kernel oil).
Petitgrain oil South American, cns., dms lb. 2.30 —
Petrolatum, NF, cream, dms., c.l., refy lb. .085 - 08625
dms., l.c.l., dlvd..... lb. .11125-11250
tanks, refy. ..... lb. .0625- .06375
NF, extra amber, dms., c.l., refy. lb. .07625- —
dms., l.c.l., dlvd ..... lb. .1025- —
tanks, refy. lb. .05375- —
NF, soft yellow, dms., c.l., refy lb. .07625- —
dms., l.c.l., dlvd ..... lb. .1025- —
tanks, refy. lb. .05375- —
USP, lily white, dms., c.l., refy. lb. .09125-.09675
dms., l.c.l., dlvd..... lb. .1175- .1225
tanks, refy. lb. .0 875- —
USP, snow white, dms., c.l., refy. .09625- —
dms., l.c.l., dlvd ..... lb. .1225- —
tanks, refy. lb. .07375- —
Full tankwagons of petrolatum are ¼c. more per lb. than tankcars.
Petroleum pitch (see Asphalt, petroleum).

### PETROLEUM PRODUCTS

**Petroleum product quotations are listed individually. For example, prices on Petroleum, mineral spirits, may be found in the M's under Mineral spirits, petroleum.**

Petroleum sulfonate, oil soluble, 60-62% sulfonic content, non-ret dms., c.l., works. lb. .16½- .18¾
non-ret. dms., t.c.l., works lb. .17½- .19
tanks, works lb. .14½- .17
50-55% sulfuric content, non-ret. dms., c.l., works lb. .16 - —
non-ret. dms., l.c.l., works lb. .17 - —
tanks, works lb. .13 - —
o-Phenetidine, dms., c.l., frt. alld. E lb .91 - —
dms., t.c.l., same basis lb. .93 - —
p-Phenetidine, dms., c.l., frt. alld. lb. 1.03 - —
dms, same basis lb 1.08 - —
Phenobarbitol, USP, dms., 100-lbs., frt. alld lb. 3.25 - —
Phenobarbital-Sodium (see sodium phenobarbital)
Phenol, 90-92% (cresol 8-10%), non-ret. dms., frt. alld E. of Rockies lb. .17¼- —
non-ret. dms., l.c.l., same basis. lb. .18¼- —
tanks, same basis ..... lb. .15¼- —
82-84% (cresol 16-18%) non-ret. dms., c.l., same basis lb. .17 - —
non-ret. dms., l.c.l., same basis. lb. .18 - —
tanks, same basis..... lb. .15 - —
39°C., or above, tar dist., non-ret. dms., c.l., same basis lb. .18½- —
non-ret. dms., l.c.l..... lb. .19½- —
tanks, same basis ..... lb. .16½- —
USP, syn., dms., c.l., t.l., frt. alld. lb. .19 - —
dms., l.c.l., same basis... lb. .21 - —
tanks, same basis..... lb. .17 - —
Phenolphthalein, USP or yellow, 250-lb dm., 2,000 lbs., frt. alld lb. 1.30 - —
250-lb dm., same basis lb 1.35 - —
Phenothiazine drench, fib dms., t.l., dlvd lb. .46 - —
fib. dms., ton lots, dlvd ... lb. .49 - —
NF, fib. dms., t.l., dlvd ... lb. .45 - —
fib. dms., ton lots, dlvd ... lb. .48 - —
Phenyl acetate, dms. 100-lb. lots, works lb. .50 - —
Phenyl salicylate (see Salol).

Phenylacetaldehyde, soln., 30%, bots. lb. 2.15 - 2.35
100%, bots. lb. 3.80 - 4.00
Phenylacetic acid, pure, cryst., cns. lb. 1.25 - 1.75
di-Phenylalanine, dms., 1-kilo kilo.65.00 - —
l-Phenyl-3-carbethoxy pyrazolone-5, fib. dms., 200-lb. lots, dlvd. E lb. 3.45 - —
fib dms., smaller lots, dlvd. E lb. 3.80 - —
N-Phenyldiethanolamine, dms., c.l., dlvd. E. lb. .50 - —
dms., l.c.l., dlvd. E lb. .51½- —
tanks, dlvd. E lb. .47½- —
m-Phenylenediamine, dms., c.l., t.l., frt. alld lb. 1.08 - —
l.c.l., l.t.l., same basis lb. 1.10 - —
o-Phenylenediamine, coml. fib. dms., 100 to 1,000 lbs., works. lb. 1.70 - 1.80
p-Phenylenediamine, tech., dms, works lb. 1.55 - —
Phenylethanolamine, dms., c.l., works lb. .75½- —
dms., l.c.l., same basis lb. .76¼- —
Phenylethyl acetate bots. lb. 1.25 - 1.40
2-Phenylethyl alcohol, extra, dms. lb. 1.14 - 1.50
Standard, dms lb. 1.10 - 1.60
b-Phenylethylamine dms., 20,000 lbs. or more, frt. alld lb. 1.50 - —
dms. smaller lots, frt. alld lb. 1.70 - 1.85
Phenylethylphenyl acetate, bots lb. 4.00 - 4.25
Phenylglyconic acid (see Mendelic acid).
Phenylhydrazine 97%, 450-lb. dms. lb. 1.45 - —
1-Phenyl-3-methyl pyrazolone-5, fib. dms., 250-lb. lots, dlvd. E. 1.80 - —
fib. dms., smaller lots, dlvd. E lb. 2.10 - —
o-Phenylphenol dms., l.c.l., works. lb. .48 - .50
p-Phenylphenol, bgs., c.l., works lb. .38½- —
bgs., l.c.l., works lb. .43 - —
Philippine copal gum, pale, chips, bgs lb. .23¼- .27
nubs, bgs. lb. .33¼- .37
seeds, bgs. lb. .20 Nom.
sorts, bgs. lb. .20 .24
Phloroglucinol, coml., fib. dms., works lb. 6.40 - —
CP, bots., works lb. 17.75 - —
Tech., fib dms., works lb. 10.45 - —
Phloxin red toner (see Eosin red toner).
Phosgene, ret. cyls., works lb. .15½- —
Phosphate, defluorinated (see under D).
Phosphate rock, Curacao, Atlantic ports, New Orleans ton. 46.50 - —
Phosphate rock, Florida, land pebble, run-of-mine, washed, dried, unground, 66-68%, b.p.l., bulk, c.l., mines. short-ton. 4.989 - 5.398
68-70%, b.p.l., bulk, c.l., same basis short-ton. 5.849 - 5.858
70-72%, b.p.l., bulk, c.l., same basis short-ton. 6.429 - 6.438
Phosphate rock, Florida, land pebble, run of mine, washed, dried, unground, 74-75%, b.p.l., bulk, c.l., same basis. short ton. 7.329 - 7.338
76-77%, b.p.l., c.l., bulk, same basis short-ton. 8.219 - 8.228
Above Florida prices are based on fuel oil at 2.52 per bbl. and labor at $1.64.
Phosphoric acid, food grade, 75%, cbys. c.l., works, E., frt. equald 100 lbs. 7.00 - —
cbys., l.c.l., same basis 100 lbs. 7.25 - 7.75
tanks, t.w., works 100 lbs. 5.60 - —
80% cbys., c.l., frt. equald 100 lbs. 7.85 - —
cbys., l.c.l., works 100 lbs. 8.10 - 9.35
tanks, t.w., works 100 lbs. 6.00 - —
NF 85%, cbys., c.l., works. 100 lbs. 8.50 - —
cbys., l.c.l., works 100 lbs. 8.75 - 9.00
tanks, t.w., works 100 lbs. 6.65 - —
Phosphorus, amorph., red, dms., t.l., works lb. .55 - —
dms., smaller lots, works lb. .56 - .57
white (yellow), solid, dms., c.l., works, frt. equald lb. .20 - .20½
dms., l.c.l., works, frt. equald lb. .21½- —
tanks, works, frt. equald, lb. .19 - —
Phosphorus oxychloride, dms., c.l., works lb. .14 - —
dms., l.c.l., works lb. .15 - —
tanks, works, frt. equald lb. .12½- —
Phosphorus pentasulfide, powd., dms., c.l., works lb. .13½- —
dms., l.c.l., works lb. .14½- .15½
Solid, dms., c.l., works lb. .11½- —
dms., l.c.l., works lb. .12½- .13½
Phosphorus pentoxide, dms., c.l., works lb. .1375- .1475
dms., l.c.l., works lb. .1475- .1675
Phosphorus sesquisulfide, dms., cs., c.l., works lb. .38 - —
dms., l.c.l., works lb. .39 - .40
Phosphorus trichloride, dms., c.l., works lb. .14 - —
dms., l.c.l., works lb. .15 - —
tanks, works lb. .12½- —
Phthalic anhydride, bgs., c.l., works, frt. equald lb. .20 - —
bgs., l.c.l., same basis lb. .21 - —
tanks, same bsais lb. .19½- —
Phthalimide 97-98%, dms., frt. alld lb. .65 - —
Phthalocyanine blue, full strength, bbls., dlvd. E. of Rockies. lb. 2.90 - —
Resinated, bbls., same basis lb. 2.75 - —
Water dispersable, bbls., same basis lb. 1.52 - —
Phthalocyanine blue prices 1c. higher W. of Rockies.
Phthalocyanine green toner, bbls., works lb. 3.35 - —
Resinated, bbls. lb. 3.00 - —
Water dispersable, bbls. lb. 1.71 - —
Phthalocyanine green prices 1c. higher W. of Rockies.
Phthalylsulfacetamide, fib. dms., 1-000-lb. lots or more lb. 5.00 - —
NF, fib. dms. lb. 5.20 - —
a-Picoline dms. c.l., works, frt. equald lb. .46 - .48
dms., l.c.l., works, frt. equald lb. .46½- .49
tanks, same basis lb. .43 - .46
b-Picoline 98% dms., t.l., works. lb. 1.05 - —
dms., l.c.l., same basis lb. 1.15 - —
tanks, same basis lb. .95 - —
b,g-Picoline 5°C. dms., c.l., works. lb. .32½- —
dms., l.c.l., works lb. .33 - —
g-Picoline, dms., f.o.b., works lb. 1.60 - —
tanks, t.l., same basis lb. 1.50 - —
Picric acid, NF, bbls. lb. .85 - —
Tech., bbls. lb. .50 - —
Pigment green B, kgs lb. 1.55 - —
Pilocarpine hydrochloride, USP, bots oz. 4.75 - 5.25
Pilocarpine nitrate, USP, bots., vials. oz. 4.65 - 5.15
Pimento, Jamaican, bgs lb. .68¾- —
Mexican, bgs. lb. .56 - —
Pimento berry oil, NF, dms. lb. 3.75 - 9.25
Pimento leaf oil, crude, cns lb. 2.50 - 2.60
Pine oil, dest.-dist., dms., l.c.l. works lb. .15 - —
dms., l.c.l. ex whse. New York. lb. .173 - —
Steam-dist., dms., ex whse., New York lb. .185 - —
dms., dlvd lb. .188 - —
Pineneedle oil, Siberian (see Abies Siberica oil).
Pink root, bls. lb. 2.25 - —

Piperazine, anhyd., dms., c.l., frt. alld. E. lb. 1.80 - —
dms., l.c.l., frt. alld. E. lb. 1.83 - —
Piperazine citrate, 36%, dms., 1,000 lbs. or more, frt. alld. lb. 1.33 - —
Piperazine dihydrochloride, 51%, dms., 1,000 lbs. or more, frt. alld. lb. 1.29 - —
Piperazine hexahydrate, 44%, dms., 1,000 lbs. or more, frt. alld lb. .90 - —
dms., 200-900 lbs., frt. alld lb. .93 - —
Piperazine phosphate, 42%, dms., 1,000 lbs. or more, frt. alld lb. 1.11 - —
Piperidine, dist., 98% min., 5 dms. or more, l.c.l., l.t.l., f.o.b. works lb. 2.63 - —
1-4 dms., same basis lb. 2.70 - —
dms., c.l., t.l., frt. equald lb. 2.55 - —
Piperonyl butoxide, dms., dlvd. E. lb. 4.50 5.05

**PITCHES**

**Pitch quotations are listed individually For example, prices on Pitch, soybean, may be found in the S's under Soybean pitch.**

Platinum metal, works oz. 81.00 -85.00
Pleurisy root, bls. lb. .45 .50
Podophyllum resin, NF, dms. lb. 12.50 -15.50
Poke root, bls. lb. .19 .22
Polymyxin, bots., bulk., 50 billion units or more 1,000,000 units. .52 - —
bulk, bots., 25-50 billion units. 1,000,000 units. .54 - —
bulk, bots., 1-25 billion units. 1,000,000 units. .56 - —
Polyoxyethylene sorbitan monostearate, dms., 20,000-lb. lots, works lb. .42 - —
dms., 10,000-20,000-lb. lots, works. lb. .44 - —
dms., smaller lots, works lb. .47 - .49
Polyoxyethylene sorbitan tristearate, dms., 20,000-lb. lots, works lb. .42 - —
dms., 10,000-20,000-lb. lots, works lb. .44 - —
dms., smaller lots, works lb. .47 - .49
Pontianak copal gum, chips, bgs. lb. .23½- .26
Nubs, bgs. lb. .38 - .44
Poppy seed, Argentine, bgs. lb. No stocks.
Dutch, bgs. lb. .14 - —
Danish, bgs. lb. .14 - —
Polish, bgs. lb. .13 - —
Turkish, bgs. lb. .11 - —
Potash, caustic, liq., 45% basis, dms., c.l., works 100 lbs. 4.25 - —
dms., l.c.l., same basis. 100 lbs. 5.25 - —
tanks, same basis 100 lbs. 3.70 - —
reg., flake, 88-92%, dms., c.l., same basis 100 lbs. 9.55 - —
dms., l.c.l., same basis. 100 lbs. 11.05 - —
solid, 88-92%, dms., c.l., works. 100 lbs. 9.10 - —
dms., l.c.l., works 100 lbs. 10.60 - —
Potassium acetate, NF, 200-lb. dm., f.o.b. works, E lb. .31 - —
Potassium bicarbonate, USP, gran. dms lb. .22 - —
powd., dms. lb. .24 - —
Potassium bichromate, gran., bgs., c.l., t.l., works lb. .18 - —
bgs., l.c.l., works lb. .18½- .19¾
Potassium bichromate in dms. ¾c. higher.
Potassium bitartrate, NF, gran., powd., 100-lb bgs., c.l., frt. equald lb. .37 - —
100-lb. bgs., 5,000 lbs. 1 shipt., same basis lb. .38 - —
100-lb bgs. smaller lots, same basis lb 40 —
Potassium borohydride, powd., dms., works lb. 16.00 -22.00
Pelletized potassium borohydride $1.25 per lb. higher in 1,000-lb lots
Potassium bromate, 200-lb. dms., c.l. frt. alld lb. .49 - —
Potassium bromide, USP gran., bbls., kgs lb. .39 .40
Potassium carbonate, dom., NF, gran., bbls., dms lb .22 - .24
Dom. tech. powd., bbls., dms lb .21 .22
Dom., calcinated, bgs., c.l. works. 100 lbs. 8.50 —
bgs., l.c.l., same basis 100 lbs. 9.55 —
Dom., hydrated, 83-85%, bgs., c.l., works 100 lbs. 7.10 - —
bgs., l.c.l., works 100 lbs 8.15 - —
Potassium chlorate, cryst., dms., c.l., works lb. .12¼- —
dms., l.c.l., works lb. .13½ .14½
Powd., dms., c.l., works lb. .12¾ —
dms., l.c.l., works lb. .14 .15
works lb. .12¼- —
Potassium chlorate, NF, cryst., dms., 2,000 lbs or more, works lb. .16¾- —
NF, gran., 25-lb metal dms lb. .36 —
NF powd., dms., 2,000 lbs. or more, works lb. .17¼- —


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Potassium chloride, industr., 99.9% KCL, bulk, c.l., works ton 29.00 - —
bgs., c.l., works ton 34.00 - —
99.3% KCL, bulk, c.l., works ton 28.00 - —
bgs., c.l., works lb 33.00 - —
USP, cryst., dms lb .17 - —
USP gran., dms lb .21 - .23
USP powd. dms lb .24 - .26

Potassium chloride agricultural (see Potassium muriate).

Potassium chromate, tech., dms., works lb .50 - .51

Potassium citrate, NF, gran., 250-lb. dms., f.o.b. works E lb .43 - —
powd. 250-lb dms., same basis, lb .46 - —

Potassium cyanide, dms., 20,000-lb. lots or more, works lb .42½- —
dms. 2,000-19,999-lb. lots, works, lb .43 - —
dms. smaller lots, works lb .44 .44½

Potassium dichromate (see Potassium bichromate).

Potassium ferricyanide, dms., ton lots, works lb .50 - —
dms., smaller lots, works lb .65 - —

Potassium ferrocyanide, dms., ton lots lb .24½- —
dms. smaller lots lb .29 - —

Potassium fluoborate, fib dms., c.l., works lb .30 - —
fib dms., l.c.l., works lb .31 - —

Potassium fluoride, dms., works lb .36 - .37

Potassium gluconate, 100-lb dm., f.o.b works E lb 1.67 - —

Potassium guaiacol sulfonate, NF, dms lb 2.10 2.30

Potassium hydroxide, tech (see Potash caustic)

Potassium hydroxide, USP, pellets, 100-lb dms. 1 to 100-dm. lots lb .33½ .38

Potassium hypophosphite, NF, fib. dms., 1,000-lb. lots lb 1.38 - —

Potassium iodide, USP cryst., gran., dms., 500-lb., f.o.b works, lb 1.55 - —

Potassium manure salt, min. 20% K₂O, bulk, c.l., works, unit-ton .17 - .1765

Potassium metabisulfite, gran. dms., Powd., dms lb .16 - —
lb .27 - —

Potassium muriate, standard, bulk, c.l., works unit-ton .37½- .39½
bagged 60% minimum $K_2O$, same basis ton 26.60- 27.80
Gran., bulk, c.l., works unit-ton .38½- .40½
bagged, 60% minimum $K_2O$, same basis ton 28.10 30.10

Inside prices apply to material contracted for prior to July 1, 1960.

Outside prices apply to material contracted for after that date but also for delivery during the current month.

Potassium nitrate, NF cryst., bbls., 20-ton lots 100 lbs 17.00 —
bbls., smaller lots 100 lbs 18.00 19.00
gran., bgs., 20-ton lots 100 lbs 9.50 —
bgs. smaller lots 100 lbs 11.00 12.00
powd., bgs., 20-ton lots 100 lbs 10.50 —
bgs. smaller lots 100 lbs 12.00 13.00

Potassium oxalate, neutral, tech., fine gran. powd., 300-lb. dm. f.o.b works E lb .32 —

Potassium pentaborate gran. dms., c.l. works ton 219.50 —
dms., ton lots, ex whse 100 lbs 17.48 - —
dms., smaller lots, ex whse 100 lbs 18.73 —

Powdered potassium pentaborate $10 per ton higher.

Potassium perchlorate, dms., c.l., works lb .18½ —
dms., l.c.l., works lb .19 .20

Potassium permanganate comL, kgs. works lb .25 .33
USP dms. works lb .29 .35

Potassium pyrophosphate, tetrabasic, dms., works lb 1475- 1575

Potassium prussiate red (see Potassium ferrocyanide)

Potassium prussiate yellow (see Potassium ferro-cyanide)

Potassium silicate, electrical grade, 30° Be. 1:2.0, dms., c.l., works 100 lbs 6.50 —
dms., l.c.l., 5 dm. lots or more, works 100 lbs 7.25 7.65
tanks, works 100 lbs 6.15 —

40.5° Be 1:2.1, dms., c.l., works, 100 lbs. 5.95 - —
dms. l.c.l., 5 dm. lots or more, works 100 lbs 6.70 - —
tanks, works 100 lbs 5.60 - —

glass grade, bgs., c.l., works, 100 lbs. 17.30 -18.00
bgs., l.c.l., works 100 lbs. 17.80 - —
Soln., 29° Be. 1:2.5, dms., c.l., works 100 lbs. 4.95 —
dms. l.c.l., 5-dm. lots or more, works 100 lbs 5.70 - —
tanks, works 100 lbs 4.60 —

Potassium silicofluoride, bgs. works, lb .09½ .10

Potassium silicofluoride in drums, 0.4c per lb higher.

Potassium stannate dms. frt. alld. lb .798 - .870

Potassium sulfate, min 50% $K_2O$, agricultural, bulk, c.l., works unit-ton .70½- .72½

Inside price applies to tonnage contracted for prior to July 1, 1960

Outside price applies to tonnage contracted for after that date but also for delivery during the current month.

Potassium sulfate NF VII, cryst., dms. lb .31 .33
NF VII, gran. 400-lb. dm lb .18 —
NF VII, powd. 400-lb dm lb .17 —

Potassium sulfocyanate NF cryst., (see Potassium thiocyanate)

Potassium thiocyanate, NF, cryst., dms. works lb .96 98
Tech. dms. works lb .77 79

Potassium titanate, ctns. c.l., works, lb 16¼ —
ctns. 5-ton lots, works lb .16½- —
ctns. 1-ton lots or less, works lb. 16¾- —

Potassium-magnesium sulfate, basis 40% $K_2SO_4$ and 18% MgO, bulk works, base price, ton 13.45 - —
bulk, works, July forward ton 14.00 - —

Potassium-sodium tartrate, NF gran or powd., 250-lb dms., c.l., works E lb 42½- —
250-lb dms. 5,000-lb. lots, same basis lb .43 - —
250-lb dms. same basis lb .43¼- —

Potassium-titanium fluoride, fib. dms., works lb .39 .40

Potassium-zirconium flouride, fib. dms. c.l., works lb .50 —
fib dms., l.c.l., works lb .52½ .55

Pregnenolone, bots gram No prices
Pregnenolone acetate, bots gram No prices
Procaine hydrochloride USP, antibiotic grade dms., 2,000-lb. lots, frt. alld lb 2.25 —

Procaine hydrochloride, USP, ampule grade, dms., 1,000-lb. lots, frt. alld lb 2.40 - —
dms., 500 lbs. lb 2.45 - —
dms., 100 lbs. lb 2.50 - —

Progesterone, USP, bots gram No prices.

Pregnenolone acetate, bots gram No prices.

Propenyl guaethol, dms. lb 24.30 27.00

b-Propriolactone, tech., dms., c.l., f.o.b. works lb .47½- —
dms., l.c.l., t.l., same basis lb .48½- —
tanks, same basis lb .45 - —

Propionic acid, syn., pure, dms., c.l., divd lb .23½- —
dms., l.c.l., divd lb .24¾- —
tanks, divd lb .20¾- —

n-Propyl acetate, dms., c.l., divd. lb .14¾- —
dms., l.c.l., divd lb .16¼- —
tanks, divd lb .12¼- —

n-Propyl alcohol, dms., c.l., divd lb .14 .15
dms., l.c.l., divd lb .15½- .16½
tanks, divd lb .11½- .12½

n-Propyl gallate, dms., 100 to 2,000-lb lots, works lb 3.90 4.40

n-Propyl-p-hyroxybenzoate, USP, dms lb 2.30 2.40

Propyl thiouracil, bots., 50 kilo lots or more kilo 55.00 —
bots., smaller lots kilo 55.10 -55.30

n-Propylamine, dms., c.l., divd lb 1.24 —
dms., l.c.l., same basis lb 1.255 —

n-Propylene dichloride consumers, dms., c.l. divd. E lb .0845- —
dms., l.c.l., same basis lb .0995- —
tanks same basis lb .07 —

Propylene dichloride prices in West 1c. higher, same basis

Propylene glycol, indust., dms., c.l., divd. E lb .15 —
dms., l.c.l., same basis lb .16¾- —
tanks, same basis lb .12½- —

USP dms., c.l., divd. E lb .17 —
dms. l.c.l., same basis lb .18¾- —
tanks, same basis lb .14½- —

Propylene glycol methyl ether, dms., c.l., divd lb .20 —
dms., l.c.l., same basis lb .21 —
tanks, same basis lb .18½- —

Propylene oxide, dms., c.l., divd E, lb .17 —
dms., l.c.l., divd. E lb .18½- —
tanks, divd. E lb .14½- —

Psyllium seed, black, bgs lb .42 - .45
Blonde bgs lb .18 .20
Husks, bgs. lb 42 45

Pumice, dom., grd., coarse to fine, 0, ½ 1, 1½, 2, 3, bgs., ton lots lb .03¾- .04¼
bgs., smaller lots lb .03¾- —

Pumpkin seed, bgs lb .25 .28

Pyrethrins, syn (see Allethrin).

Pyrethrum flowers, fine grd. 0.9% pyrethrins, bgs., ton, works lb .50 - —

Powd., 1.3% pyrethrins, bgs., ton works lb .71 - —

Pyrethrum liquid, 20-1 basis (2 grams pyrethrins per 100cc odorless base), dms., works gal 9.60 9.80

100/1 basis (10 grams pyrethrine per 100cc odorless base), dms., works gal. 45.90 -46.90

Pyrethrum oleoresin, dewaxed, 20% purif., 20% dms., works lb 11.00 11.35

Pyridine, denat., dms., works lb 11.00 11.35

Quassia chips lb .10 - —

Quicksilver (see Mercury, metal)

Quince seed, bgs lb 1.75 - 2.00

Quinidine sulfate, USP, 1,000-oz. dm oz. .78½- —

Quinine, NF, 1,000-oz. dm. oz. .3750- —

Quinine bisulfate, USP, 1,000-oz dm. oz. .28 —

Quinine hydrochloride, 1,000-oz dm oz. .3650- —

Quinine sulfate, USP, 1,000-oz dm. oz. .3150- —

Quinoline, dms., c.l., frt. equald. lb 50¾ —
dms., l.c.l., same basis lb 51¼- —
tanks same basis lb 50 —

Rhubarb root, India, whole, bgs. lb .30 - —
powd., bgs. lb .35 - —

Riboflavin, USP, fib. dms., kilo or more, divd kilo. 36.00 - —

Riboflavin, 5-phosphate-sodium, fib. dms., kilo or more, divd. kilo. 104.50 - —

Rice bran oil, clarified, dms., l.c.l. tanks, divd. E lb .15½- —

Ricinoleic acid (see Castor oil acids split).

Rochelle salt (see Potassium-sodium tartrate)

Roofing pitch (see Coaltar pitch roofing).

Rose oil, nat., Bulgarian, bots lb 1,152.00- —
Turkish, bots lb 560.00 -750.00

Rosemary oil, Spanish, NF, cns., dms lb .97 1.40
Spanish, tech., cns., dms lb .50 - 1.20

Rosin gum and wood (see Naval Stores in Protective Coatings market).

Rotenone, fib. dms., works unit-lb .10½- —
Resin, 25-45% fib dms., works, unit-lb .10½- —

Rottenstone, bgs., 5-ton lots, ex-whse lb .03¾- —
bgs., ton lots, same basis lb .04¼- —

Rubber solvent, petroleum, 115°F-245°F b.r., tankcars, New Jersey and New York, gal. .19 - —
Group 3 gal. .13875- —
Houston, Texas gal. .155 —

Rue oil, bots lb 2.75 3.00

Rutin, NF, fib dms., 10 kilo lots, kilo 11.00 - —
fib. dms., 5 kilo lots kilo 11.50 - —
fib. dms., 1 kilo kilo 13.00 - —

Ryania, 100%, powd., bgs., c.l., works lb .22 - —
bgs., l.c.l., same basis lb .24 - —

## S

S acid, bbls., works lb 3.25 - —

Sabadilla seed, activated, ground with lime, bbls lb .42 - .44

Saccharin, calcium, fib dms., 1,000-lb lots, works lb 2.50 - —

Saccharin, USP, gran., soluble, dms., 1,000-lb. lots lb 1.50 - —
dms., smaller lots lb 1.60 - —

USP, powd., soluble, dms., 1,000-lb. lots lb 1.55 - —
dms., smaller lots lb 1.65 - —

USP, powd., insoluble, dms., 1,000-lb. lots lb 1.53 - —
dms., smaller lots lb 1.63 - —

Safflower oil, dms., New York lb .1795- .1820
tanks, Atl., coast lb .1595- .1620

Saffron, Mancha Superior, tins lb 19.50 - —

Safrol, dms. lb .65 - —

Sage, Dalmatian, bgs lb .40 - —
Greek, cns. lb .15 - —
Italian, cns. lb .18 - —

Sage oil, clary, bots lb 12.00 -15.00
Dalmatian, cns lb 2.85 3.25
Spanish, cns lb 1.25 1.75

Sal soda (see Soda sal).

Salicylaldehyde, dms., c.l., t.l., f.o.b., plant, frt. equald lb 1.23 - —
dms., l.c.l., same basis lb 1.25 - —

Salicylamide, 100-lb dms lb 1.05 - —

Salicylic acid, tech, fib dms., c.l., t.l., divd lb .40½- —
fib dms, l.c.l., divd lb .44¾- —

USP, cryst., 200-lb. fib. dms., 1,000 lbs. or more lb .51¾- —
200-lb fib dms, less than 1,000 lbs lb .54¾- —
Cryst., 100-lb. fib. dms., 1,000 lbs. or more lb .53¾- —
100-lb fib dms, less than 1,000 lbs lb .56¾- —

Salicylic acid, USP, powd., 100-lb. fib. dms., 1,000 lbs. or more lb .58¾- —
100-lb fib dms., less than 1,000 lbs lb .61¾- —

Salol, NF, gran., bbls. kgs lb 1.20 —
Powdered salol 25c per lb higher.

Salt, rock, paper bgs, c.l 100 lbs 1.09 - —

Salt, table, vacuum common, fine, paper bgs, c.l 100 lbs 1.34 - —

Saltcake, dom., bulk, works, 100% $Na_2SO_4$ basis ton 28.00 - —

Saltpeter (see Potassium nitrate)

Sandalwood, E Indian, chips, bgs., powd, fib dms lb .55 .66
Sandalwood oil, cns lb 26.00 -30.00

Sarcosine, tech., tanks, f.o.b., works, frt equald lb 1.03 —
lb No stocks.

Sassafras oil, artif., dms lb .45 - —
Nat., dom., dms lb 1.40 - —

Savory oil, cns lb 4.75 - —

Schaeffer's salt, paste, dms., frt alld 100% basis lb .83 - —
Powd. bgs. frt alld. 100% basis, lb .95 - —

Scopolamine hydrobromide, USP, bots oz. 13.00 - —

Sebacic acid, CP, bgs. c.l. works, lb .69½- —
bgs. l.c.l., works lb .71½- —
Purified, bgs. c.l., works lb .65½- —
bgs. l.c.l., works lb .67½- —

Seidlitz mixture, fib dms, 5,000-lb. lots lb .30½- —
fib dms., smaller lots lb .31 .32

Selenium, powd., 99½%, dms., dlvd. lb 7.00 - —

Senega root, bls lb 3.00 - 3.25

Senna leaves, Alexandria, whole and half, bls lb .20 - .22
siftings lb .16 - —
Tinnevelly, No. 1, bls lb .22 - —
No. 2, bls lb .18 - —
No. 3, bls lb .14 - —
pods, bls lb .28 - —
powd., bbls., bxs lb .17 - —

Serpentaria, root, bls lb 6.50 - —

Sesame oil, USP, dms., l.c.l lb .37 - .38

Sesame seed, Colombian, bgs lb .15½- —
Lebanese, hulled, bgs lb .19 - —
Nicaraguan, hulled, bgs lb .21 - —
nat., bgs. lb .15 - —
Salvadorian, Nat, bgs lb .16 - —

Shellac, bleached, bonedry, bgs. 1,500-lb. lots lb .47 - —
dms., l.c.l., works lb .22 .20½
bbls., 1,500-lb lots lb .46 - —
kgs., 1,500-lb. lots lb .47 - —

Bonedry shellacs prices for less than 1,500-lb lots 1c per lb higher for all packages.

Shellac, bleached, refd., bgs., 1,500-lb lots lb .56 - —
bbls., 1,500-lb lots lb .57 - —
kgs., 1,500-lb lots lb .58 - —

Shellac, orange, lemon No. 1, bgs., 10-bg. lots lb .37 .39
lemon No. 2, bgs. 10-bg lots, superfine, bgs. 10-bg. lots lb .34 .37
Shellac in 1 to 10-bg lots 1c per lb more.

Shingle stain oil, tar distillate, dms., c.l., works gal .37 - —
dms., l.c.l., works gal .42 - —
tanks, works gal .25 - —

Sienna, pigment, burnt, paper bgs., c.l., works lb .06½- .18½
Raw, paper bgs., c.l., works lb .06½- .17¾
paper bgs. l.c.l., works lb .06¾- .16¾

Silica, amorph., dry-grd. 325 mesh, bgs., c.l., works ton 25.00 —
bgs. l.c.l., works, ex whse, ton 45.00 -55.00

Silica, hard-quartz, 99½%, 325 mesh, bgs., c.l., works ton 30.00 - —
bgs., l.c.l., works ton 25.00 - —
99½%, 140 mesh, bgs., c.l., works ton 15.00 - —
bgs., l.c.l., works ton 20.00 - —

Silicon tetrachloride, tech., dms., c.l., works lb .20 - —
tanks, works lb .15 - —

Silver bullion, ingots, cs. Troy oz. .91¾- —

Silver cyanide, bots., 1,000-oz. lots, oz. .94¾- —
bots., 500-oz. lots oz. .95¼- —
bots., 100-oz. lots oz. .96¼- —

Silver nitrate, CP, cryst., bots., 1,000 to 4,000 oz., f.o.b. works oz. .67¼- —
bots. 250-500 oz., same basis, oz. 67¾- —

USP granular silver nitrate 4c. per oz. higher.

Silver proteinate, mild, USP, 16-oz. bots oz. 1.46 - —

Snakeroot oil, Canada, cns lb 40.00 -43.00

Soapbark, crushed, bls lb .30 .35
Powd., bls lb .35 .40
Whole, bls lb .20 .25

Soda ash, dense, 58%, paper bgs., c.l., works 100 lbs. 1.90 —
paper bgs., l.c.l., stock pts., 100 lbs. 3.00 4.77
bulk, c.l. works 100 lbs 1.60 —

Soda ash, light, 58%, paper bgs., c.l., works 100 lbs 1.85 —
paper bgs., l.c.l., stock pts., 100 lbs. 3.95 4.72
bulk, c.l., works 100 lbs 1.55 —

Soda, caustic, flake, 76%, dms., c.l., works, frt equald 100 lbs. 5.20 - —
liq. 50% sellers tanks works, dry basis 100 lbs. 2.90 - —
50% rayon type, sellers tanks, works, dry basis 100 lbs. 2.90 3.00

Soda, caustic, liq. 73%, sellers tanks works, dry basis, 100 lbs. 3.00 —
liq., 73% rayon type, sellers' tanks, works, dry basis lb. 3.00 3.10
solid 76% dms. c.l., works, 100 lbs 4.80 —

Soda sal. conc. bgs. c.l. works, 100 lbs. 2.50 - —
bgs. smaller lots, works 100 lbs. 2.80 - —

Sodium acetate, anhyd., bgs., c.l., bgs., l.c.l., same basis, divd. E lb .14½- —
NF, 60% gran. dms. c.l. works, lb .16½- —
dms., l.c.l., works lb .15½- —
lb .17½- —

Sodium alginate, NF, white powd., dom. 300 lbs. or more lb 1.03 - —

Sodium p-aminosalicylate, dms., 100-lb lots or more, frt. adjusted lb 1.90 - —

Sodium antimoniate, bgs. c.l. divd. E lb .27½- —
bgs., l.c.l., divd. E lb .29 - —

Sodium arsenate, 60% arsenic pentoxide, 200 lb. dm. less than ton lots, f.o.b. works lb .24 - —
ton lots or more, same basis, lb .23½- —

Sodium arsenite, 94% soluble pink powder, 75% arsenious oxide, dealers, 100-lb dms., ton lots or more, f.o.b., works lb .18½- —
1,600-1,900 dms., same basis lb .19 - —
100-500 dms., same basis lb .20 - —

Sodium ascorbate, dms., 100-kilos., dms., f.o.b. works kilo. 6.80 - —
less than 100-kilos kilo. 7.05 - —

Sodium benzoate, tech., dms., c.l., t.l., frt. alld lb .35 - —
dms. l.c.l. same basis lb .39 - —
USP dms., c.l., t.l. frt alld lb .38 - —
dms., ton lots, same basis lb .43 - —
dms., 1,000-lb lots, same basis, lb .45 - —

Sodium bicarbonate, USP, gran., bgs., c.l., works 100 lbs 2.95 - —
bgs. l.c.l. works 100 lbs 3.85 - —
USP powd., bgs. c.l., works, 100 lbs. 2.55 - —
bgs. l.c.l. works 100 lbs. 3.45 - —

Sodium bichromate, gran., ogs., c.l., t.l., works lb .13 - —
bgs., l.c.l. works lb .13½- .14¼

Sodium bichromate in dms ¾c. per lb higher

Sodium bifluoride, fib. dms., c.l., works, frt. equald lb .19½- —
fib. dms., l.c.l., same basis lb .2025- —

Sodium bisulfate, bulk c.l. works, 100 lbs. 2.00 —
dms. c.l., frt. equald 100 lbs. 3.00 3.60
dms. l.c.l. frt equald 100 lbs. 3.50 4.10

Sodium bisulfite annyd., bgs., c.l., works 100 lbs 5.00 - —
bgs. l.c.l., works 100 lbs 5.45 - —
Soln., 35° bbls. c.l., works 100 lbs 1.70 - —
bbls. l.c.l works 100 lbs 2.20 - —

Sodium borate (see Borax)

Sodium borohydride, powd., dms., c.l., works lb 19.90 —
dms. l.c.l., works lb 33.00 -40.00
stabilized water soln., 12% NaBH, 100% basis, dms., works lb 15.00 - —
Pelletized sodium borohydride $1 per lb higher in 1,000-lb lots.

Sodium bromide, USP, gran., dms., works lb .40 - —

Sodium carbonate, cryst. monohydrated (see Soda, sal)

Sodium carbonate, monohydrated, bgs., c.l., works 100 lbs 3.10 - —
bgs., l.c.l. works 100 lbs 3.50 - —

Sodium carboxymethyl cellulose (see CMC).

Sodium chlorate, cryst., 350-lb. dms., c.l., works lb .09 —
dms. l.c.l., works lb .09½- .10¼

Sodium chlorate in 100-lb. dms. only, ¼c per lb higher.

Sodium chloride, tech. (see Salt).

Sodium chloride, USP, gran., bgs. lb .05 - —

Sodium chlorite, tech., dms., c.l., works lb .58 - —
dms. 20-dm lots or more works, lb .66 - —
dms., smaller lots, works lb .70 - .73

Sodium chloroacetate, tech., dms., c.l., works lb .27 - —
dms. l.c.l., works lb .28 - —

Sodium chromate, anhyd., fib. dms., c.l., t.l., works lb .14¾- —
fib dms, l.c.l., works lb .15¼- .16¼

Sodium chromate, tetrahydrate, bgs. c.l., t.l., works lb .1015- —
bgs., l.c.l. lb .1065- .1180

Sodium citrate, anhyd. 200-lb dm., f.o.b works E lb .62 - —
NF VIII, gran. bgs. c.l., same basis lb .26 - —
USP XIV, gran. bgs., c.l., same basis lb .29 —

Sodium citrate, USP, powd. prices ½c higher.

Sodium cyanate, dms. 1,000-lb. lots, works lb .85 —
dms. smaller lots, works lb .90 1.10

Sodium cyanide, briquettes or gran., 97 percent min., dms., works, 20,000-lb lots lb .176 - —
dms., same basis, 5,000 to 19,999-lb lots lb .188 - —
dms. same basis, 1,000 to 4,900-lb lots lb .198 —

Sodium cyclamate, 100-lb dm., f.o.b. works lb 1.95 - —

## Q

## R

R salt paste, dms., frt alld., 100% basis lb .98 —
Powd. frt alld. 100% basis lb 1.08 —

Rapeseed oil, dms. lb .18½- .18¾
tanks lb .17 - —

Rare earth oxalate, NF, 45-50%, bgs. works lb 1.15 —

Rauwolfia serpentina root, powd., bbls. dms lb 1.00 1.20

Red carmine, No. 40 (see Carmine).

Red oil (see Oleic acid)

### RED PIGMENTS

**Red pigment quotations are listed individually. For example, prices on Red, lithol toner, may be found in the L's under Lithol red toner.**

Red precipitate (see Mercuric oxide red)

Red toner, Lake C alizanine, bbls., works lb 1.30 - —

Reserpine, cryst. bots gram 1.25 - —

Resorcinol, tech. grade, bgs., c.l., works, frt. equald lb .77½- —
bgs., l.c.l., same basis lb .78½- —

Resorcinol in dms. 1c per lb more

USP powd. dms. works lb 2.95 —

Resorcinol monoacetate, NF dms. lb 3.50 —

Rhatany root, bgs lb .14 .16

Rhodamine red toner, molybdated, PMA, kgs. works lb 6.00 —

Tungstated PTMA works, kgs lb 6.60 —

Rhodinol, 5-lb cans lb 42.00 -51.00

Rhodinol, Synthetic lb 14.00 16.00

Sodium diacetate, anhyd., 39-41% acetic acid, dms., c.l., works lb. .18 - —
250-lb. dms. l.c.l., works lb. 18¾ - —
Tech., 33-35% acetic acid, dms., l.c.l., works lb. .15 - —
250-lb dms., l.c.l., works lb. 15¾ - —
Sodium dimethyl dithiocarbamate, 40% soln. dms. c.l., t.l. frt. alld., 100% basis lb .42 - —
dms., l.c.l., t.l., same basis lb. .47 - .53
tanks, same basis lb .38 - —
Sodium ferrocyanide, bgs., 10-ton lots lb .13½ - —
bgs. smaller lots lb. .14¾ - —
Sodium fluoride white, 97%. fib. dms., c.l., works, frt. equald lb. .1390 - —
fib. dms., l.c.l., works, frt. equald lb. .1465 - —
Sodium formate. bgs., c.l. works. 100 lbs. 7.05 - —
bgs. l.c.l., ex whse 100 lbs 8.65 - —
Sodium gentisate. 100-lb. fib. dms. lb 5.50 - —
Sodium gluconate, refd., 250-lb. dm., f.o.b works E lb .64 - —
Tech. bgs. c.l. t.l., same basis lb. .34 - —
Sodium hydride 50% soln in oil, dms., works lb. 1.25 2.50
25% soln in oil, dms., 50 lbs. or less. f.o.b shipping point. lb. 2.20 - —
dms., 50-99 lbs same basis lb 1.77 - —
dms., 100-999 lbs., same basis lb 1.20 - —
dms., 1,000 lbs or more, same basis lb .95 - —
Sodium hydrosulfide (see Sodium sulfhydrate).
Sodium hydrosulfite dms c.l., frt alld lb 23½ - —
dms. l.c.l. frt alld. lb. 23¾ - —
Sodium hydroxide. NF, pellets, 100-lb dms. 1 to 100-dm lots. lb .23½ - .25
Sodium hydroxide, tech (see Soda, caustic).
Sodium hypophosphite NF dms. 1,000-lb. lots lb. .99 - —
Sodium hyposulfite (see Sodium thiosulfate).
Sodium iodide. USP. 300-lb dms. f.o.b. works lb. 2.13 - —
Sodium lauryl sulfate. dms., c.l., dlvd lb. .20½ - —
dms., t.l., dlvd. lb. .21½ - —
tanks, dlvd lb 19½ - —
Sodium lignin sulfonate, bgs., c.l., works 100 lbs 4.25 6.50
c.l. bgs. works 100 lbs 4.40 7.00
Sodium metabisulfite (see Sodium bisulfite)
Sodium metaborate octahydrate gran bgs. c.l. works ton 210 00 - —
bgs., ton lots, ex whse 100 lbs. 8.30 - —
bgs., smaller lots ex wh e 100 lbs. 9.61 -11.61
Tetrahydrate bgs c.l. works n 210 00 - —
bgs., ton lots, ex whse 100 lbs. 14.83 - —
bgs. smaller lots ex w. 100 lbs. 16.08 -18.08
Sodium metallic, bricks, c.l. works lb .21 - —
Fused, 18,000-lb lots or more, works lb. .19½ - —
tanks, works lb. .17 - —
Sodium metalinate. bbls., frt. alld. lb .62 - —
Sodium metaphosphate, bgs., c.l., f.o.b shipping pt 100 lbs. 11 10 - —
bgs., l.c.l., same basis 100 lbs. 11.85 - —
dms., c.l., same basis 100 lbs. 11 70 - —
dms., l.c.l. same basis 100 lbs. 12 45 - —
Sodium metasilicate anhyd., bgs. c.l., works 100 lbs 5.70 - —
bgs., 6,000-19,900 lb lots works. 100 lbs 6.05 - —
dms., c.l., works 100 lbs. 6.20 - —
dms., l.c.l. works 100 lbs 6.55 - —
Sodium metasilicate pentahydrate. bgs. c.l., works 100 lbs 4.45 —
bgs., l.c.l., works 100 lbs 4.80 6.75
dms., l.c.l., works 100 lbs. 4.95 —
dms., l.c.l., works 100 lbs 5.30 7.25
Sodium molybdate anhyd., dms. works, frt. equald lb .92 .99
Cryst. dms. works frt alld lb .74 .76
Sodium monoglutamate (see Monosodium glutamate)
Sodium monohydrate (see Sodium carbonate monohydrated)
Sodium naphthionate, bbls. . . . lb. .77 - —
Sodium nitrate dom., crude, bgs. c.l. works ton 48 00 - —
bulk, c.l., works ton 44 00 - —
Imp. crude. 100-lb. bgs., c.l., Atl. Gulf, Pac., whse ton 48 00 - —
bulk c.l., same basis ton 44 00 - —
Sodium nitrite. USP bbls., c.l. works, frt. equald 100 lbs. 9.40 - —
bbls., l.c.l., same basis 100 lbs. 11.40 - —
Sodium orthosilicate conc., dms. c.l., works 100 lbs 6.70 —
dms., l.c.l., works 100 lbs 7 05 7.65
Hydrated, flake bbls. c.l., works 100 lbs 6.65 —
bbls. l.c.l. works 100 lbs 7 60 7.90
Sodium oxalate 88% bgs. works 100 lbs 12.35 - —
99% bgs works 100 lbs 15 40 - —
Sodium para-aminobenzoate (see Sodium p-aminobenzoate)
Sodium para aminosalicylate (see Sodium p-aminosalicylate)
Sodium pentachlorophenate briquets dms., c.l., works, frt equald lb. .26 —
dms., l.c.l. same basis lb. .27½ .34
Pellets, dms., c.l. same basis lb. 26 —
dms. c.l. same basis lb .27½ .34
Powd. dms. c.l. same basis lb. 25 —
dms. l.c.l. same basis lb. 26½ .33
Sodium pentabarbital USP dms., 100 lbs or more lb. 6.00 —
Sodium perborate NF, tech., bgs., c.l., works lb. .18½ - —
bgs. l.c.l. works lb. .19 .21
Sodium peroxide dms., c.l., t.l., dlvd E. of Miss lb. .21½ - —
dms. l.c.l. same basis lb .22 .22½
Sodium phenobarbital USP. 100-lb dms lb. 3.75 —
Sodium phenosulfonate, USP. IX. gran., dms lb. .52 .53
NF powd dms lb .55 .56
Sodium phosphate dibasic, anhyd., bgs c.l frt equald 100 lbs. 8.10 - —
bgs., l.c.l., same basis 100 lbs. 8.50 9.55
Sodium phosphate, dibasic, cryst. bgs., c.l., t.l., frt equald 100 lbs. 4.75 —
bgs., l.c.l., frt. equald 100 lbs. 5.15 5.90
Dibasic duohydrate, bgs., c.l. frt equald 100 lbs. 7.75 - —
bgs., l.c.l., same basis 100 lbs. 8.25 - —
Monobasic anhyd bgs. c.l. frt equald 100 lbs. 9.15 - —
bgs., l.c.l., same basis 100 lbs. 9.53 -10.15
Tribasic anhyd. bgs. c.l. frt equald 100 lbs. 9.15 - —
bgs. l.c.l. frt equald 100 lbs. 9.60 -10.20
Sodium phosphate in dms 60c to 80c. higher than bgs.
Sodium phosphate, USP, dried, powd. bgs., dms., works lb. .19 .20½
Sodium picramate, tech., paste, dms. f.o.b works, frt. equald lb. .90 - —
Sodium propionate, any quantity, dms. dlvd E of Rockies. lb. .37 - —
Prices W of Rockies 3c per lb more.
Sodium prussiate yellow (see Sodium ferrocyanide).

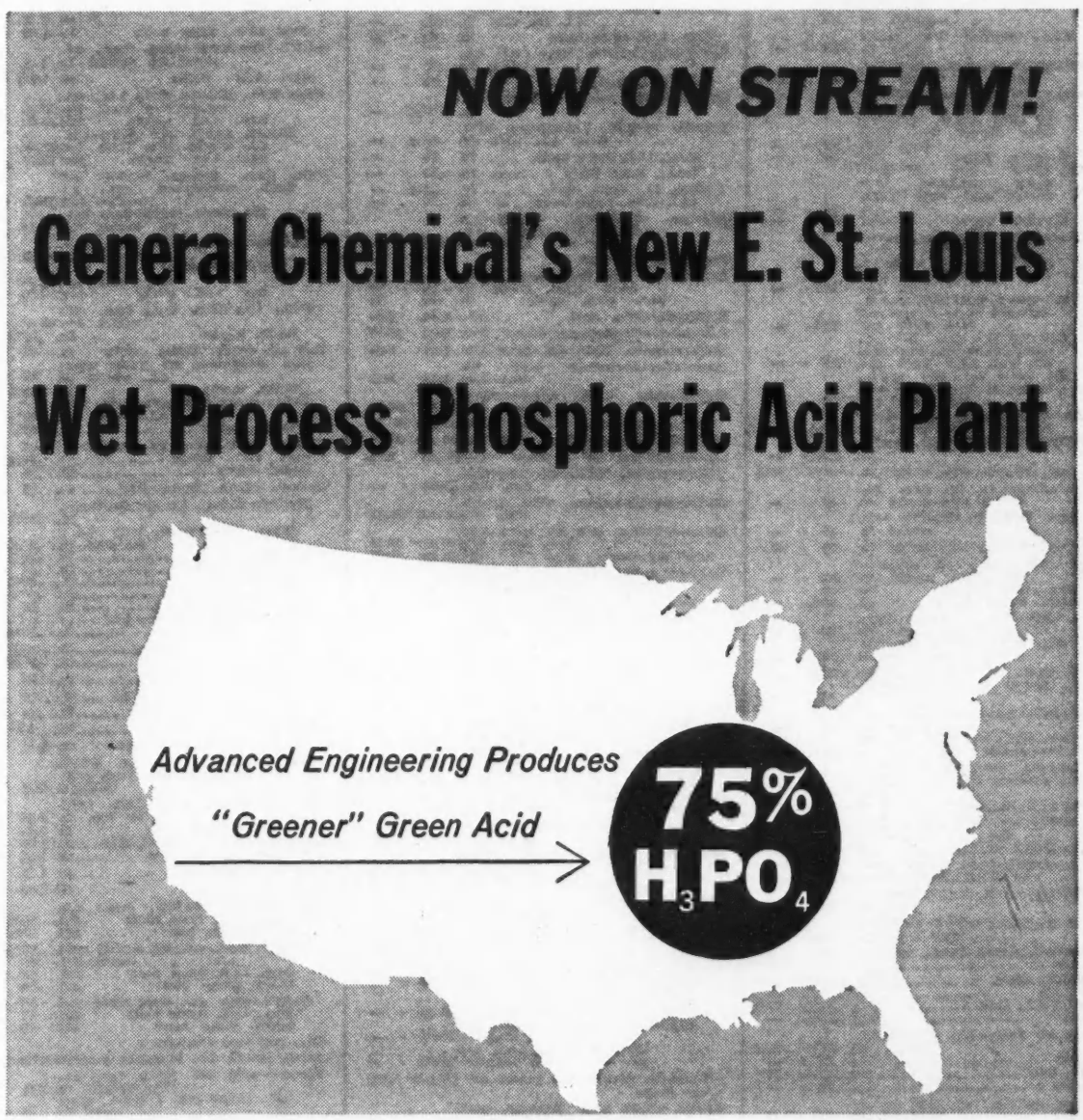
Sodium pyrophosphate, acid, bgs., c.l., works, frt equald. 100 lbs. 11.25 - —
bgs., l.c.l., same basis 100 lbs. 12.00 -12.50
Sodium pyrophosphate, ferric, dms., c.l., t.l., works lb. .36 —
dms. l.c.l. works lb. .37 - .39
Tetrabasic, anhyd., bgs., c.l., works, frt. equald 100 lbs. 7.55 - —
bgs., l.c.l., same basis 100 lbs. 8.30 - —
Sodium salicylate USP dms., 1,000-lbs or more lb. .78½ - —
dms. less than 1,000 lbs. dms. lb. .81½ - —
Sodium sesquicarbonate, bgs., c.l., works 100 lbs. 2.35 —
l.c.l., dlvd. zone 1 . . . . . 100 lbs. 4.10 - 4.35
dlvd zone 2 . . . . . 100 lbs. 4.35 4.60
dlvd zone 3 . . . . . 100 lbs. 4.75 4.90
dlvd zone 4 . . . . . 100 lbs. 5.35 5.60
Sales zones are (1) Atl. states E. of Miss., R and N of south bound of Ky. and Va., Ala., La and Miss. south of 31°; Tex. E. of 100°; S of 31° Fla., also Me., N H and Vt in which there are special county zones; Davenport, Ia., and St. Louis; (2) Ark. E. of 98° Ga.; Iowa (except Davenport) Minn., Mo. (except St. Louis) Neb. E. of 98° N. C., S. C., Tenn and Tex. N of 31° and E. of 100° (except Wichita Falls); also Ala., La. and Miss. No of 31°; (3) Ark. W of 96° Kan., Neb. W. of 98° N. D., Okla., S. D., Tex., W of 100° (including Wichita Falls excluding El Paso); (4) Ariz., Colo., Idaho, Mont., Nev., N. M., Utah Wyo and El Paso Tex.
Sodium sesquisilicate, anhyd., bgs., c.l. t.l. works 100 lbs 5.70 - —
dms c.l. t.l., works 100 lbs 6.20 - —
hydrated, bgs., c.l., works. 100 lbs. 5.00 - —
bgs. 6,000-19,900 lb tots, works 100 lbs 5.35 - —
dms. c.l., works 100 lbs 5.50 - —
dms. 6,000-19,900 lb lots works. 100 lbs. 5.85 - —

Sodium silicate, liq., 40° Be., 1:3.2, turbid dms., c.l., works. 100 lbs. 1.65 - —
dms., l.c.l., works 100 lbs 1.90 2.40
tanks works 100 lbs 1.20 —
47° Be 1:29.9 turbid, dms., c.l., works 100 lbs 2.25 —
dms., l.c.l., works 100 lbs 2.60 3.45
tanks, works 100 lbs 1.90 —
52° Be 1:2.4 turbid, dms., c.l., works 100 lbs 2.65 —
dms., l.c.l., works 100 lbs 3.00 3.50
tanks, works 100 lbs 2.30 —
Solid, 1:3.2. bgs. works ton.67.50 —
Sodium silicofluoride, bgs., c.l., works lb. .065 —
bgs., l.c.l., works lb .725 —
Sodium silicofluoride in dms. 0.4c per lb. higher
Sodium stannate dms. works. frt. alld, E. lb. .658 - .717
Sodium sulfa drugs (see Sulfa name)
Sodium sulfanilate bbls. works lb. .22 - —
Sodium sulfate NF VII, dried, powd., dms lb. .22½ - —
Tech., anhyd. bgs., c.l., dlvd E. ton.56.00 - —
Tech., detergent, rayon grade, bgs., c.l., works ton.38.00 - —
bulk, c.l., works ton.34.00 - —
USP cryst. fib dms lb .17¼ - .18
Sodium sulfhydrate, flake, 70-72%, dms. c.l. works, frt. equald lb. .07¼ - —
dms., l.c.l., same basis lb. .08¼ - —
Liq. 40-44% tanks, works, 100% basis ton.130.00 —

Sodium sulfide flake, dms., c.l. works E. frt equald lb .06 —
dms. l.c.l. same basis lb .07 —
Fused, bbls. c.l. works E., frt equald lb .05½ —
bbls. l.c.l. same basis lb .06½ —
anhyd., tech., bgs., c.l., works. 100 lbs. 3.50 - —
bgs. t.l. same basis 100 lbs 4.00 —
Sodium sulfite anhyd. powd. ngs. c.l works 100 lbs 7.55 —
bgs. l.c.l. same basis 100 lbs 7.95 —
Sodium sulfocyanide CP (see Sodium thiocyanate)
Sodium tetraborate (see Borax)
Sodium tetrasulfide liq. 40% dms., c.l., works frt equald lb .04½ —
dms., l.c.l same basis lb .05½ —
Sodium thiocyanate, purified, cryst., 250-lb dms lb. .90 - —
Tech. anhyd. dms., 1 ton lots or more, works lb. .357 —
dms., less than ton lots, works lb. .387 —
Sodium thiosulfate NF cryst. bbls. lb .13½ —
Tech. anhyd. 100-lb bgs. c.l., t.l., frt equald 100 lbs 7.75 —
100-lb bgs. l.c.l. t.l.l., frt equald 100 lbs 8.15 —
photograde, 64-lb. bgs., c.l., t.l., frt. equald lb. .0775 —
64-lb bgs. l.c.l. t.l.l., frt. equald lb. .0815 —


NOW ON STREAM!

General Chemical's New E. St. Louis Wet Process Phosphoric Acid Plant




The green acid from General Chemical's latest design wet process phosphoric acid plant is *really* green! It runs 75% $H_3PO_4$ consistently—or 54.3% $P_2O_5$. It is cleaner, with lower solids content, and therefore easier for you to use and handle.

For information on this new greener phosphoric acid—and how it can bring you savings in your own operations—call your nearest General Chemical office.

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GENERAL CHEMICAL DIVISION
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| | | | |
|---|---|---|---|
| Sodium thiosulfate, tech., pentahydrate, photo grade, 100-lb. bgs., c.l., t.l., frt. equald. 100 lbs. | 4.95 | • | — |
| 100-lb. bgs., l.c.l., l.t.l., frt. equald 100 lbs | 5.20 | • | — |
| Sodium titanate, ctns. c.l., works lb. | .14¼ | | — |
| ctns. 5-ton lots, works lb. | .14½ | | — |
| ctns., l-ton lots or less, works lb. | .14¾ | | — |
| Sodium trichloroacetate, 90%, 100-lb dms., c.l., frt alld E lb. | .35 | | — |
| 50-lb dms., c.l., frt. alld. E lb | .35½ | | — |
| 10-lb cns., c.l. frt alld E lb | .42 | | — |
| Prices on Sodium trichloroacetate W of the Rockies are 1¾c per pound higher | | | |
| Sodium tripolyphosphate, bgs., c.l., works, frt. equald 100 lbs. | 7.90 | • | — |
| bgs., l.c.l., same basis 100 lbs. | 8.65 | • | — |
| bulk, hopper cars, same basis, 100 lbs. | 7.35 | • | — |
| Sodium trisilicate, powd., 1:3.2, bgs. c.l., works 100 lbs | 8.95 | | — |
| bgs., l.c.l., works 100 lbs | 9.70 | | 13.13 |
| dms., c.l., works 100 lbs | 9.45 | | — |
| dms., l.c.l., works 100 lbs | 10.20 | | 10.60 |
| Sodium tungstate, tech., kgs. dlvd. E lb | 1.32 | • | — |
| Sodium-ammonium phosphate, purif., cryst., dms., works lb | .52 | • | — |
| Sodium carboxymethyl cellulose (see CMC). | | | |
| Sodium cinchophen (see Cinchophen-sodium). | | | |
| Sodium formaldehyde sulfoxylate dms., t.l., dlvd lb. | .22½ | | — |
| dms., l.t.l., same basis lb. | .23 | • | — |
| Sodium-zirconyl sulfate, fib dms. 1,000-lb. lots or more works lb | .28 | • | — |
| fib. dms., smaller lots, same basis lb | .30 | • | — |
| Solvent naphtha, coaltar, high-flash, tanks, frt equald gal. | .30 | • | .35½ |
| Solvent naphtha, petroleum, straight aromatic, 310°-360°F b.r., 14°-16°C m.a.p., tankcars, New Jersey and New York gal. | .29 | • | — |
| Houston, Texas gal. | .29 | • | — |
| 355°-420°F b.r., 17°-18°C. m.a.p., tankcars, New Jersey and New York, gal | .30 | • | — |
| Houston, Texas gal. | .30 | • | — |
| Solvent naphtha, petroleum, partial aromatic, 211°-265°F b.r., 31°C m.a.p., tankcars, New Jersey and New York gal. | .235 | • | — |
| 286°-340°F. b.r., 22°C. m.a.p., tankcars, New Jersey and New York gal | .275 | • | — |
| 319°-380°F. b.r., 27° C. m.a.p., tankcars, New Jersey and New York gal. | .27 | • | — |
| 322°-395°F b.r., 28°C m.a.p., tankcars, New Jersey and New York gal. | .28 | • | — |
| Sorbitan monostearate fib dms. 20,000 lb lots, works lb. | 33½ | | — |
| 10,000 to 20,000-lb. lots, works, lb. | .35½ | | — |
| fib dms., smaller lots, works lb | 38½ | | .40½ |
| Sorbitan tristearate fib dms. 20,000-lb. lots, works lb | .34 | • | — |
| fib dms. 10,000 to 20,000-lb lots, works lb | .36 | • | — |
| fib. dms., smaller lots, works lb | .39 | • | .41 |
| Sorbitol, NF reg., 70% aqueous dms., c.l., works lb | .18 | • | — |
| dms., l.c.l works lb | .19 | • | — |
| tanks, works lb. | .16¼ | | — |
| cryst., resin grade, pellets, dms., c.l., works lb. | .23 | • | — |
| dms. 1 to 5-ton lots works lb | .25 | | .26 |
| powd., dms., c.l., works lb. | .38½ | | — |
| dms. 10,000 to 20,000 lb. lots, works lb | .40½ | | — |
| Sorbitol, soln., coml., aqueous, dms., c.l., works lb | .26 | | — |
| dms., l.c.l., works lb. | .27 | • | — |
| tanks, works lb. | .23¼ | | — |
| Soya protein, chemically isolated, old process, bgs., c.l., works, lb | .23 | | — |
| bgs., l.c.l., works lb | .23¼ | | .23½ |
| Chemically isolated new process, bgs., c.l., works lb. | .20 | • | — |
| bgs., l.c.l., works lb. | .20¼ | | .29½ |
| Soybean meal, 44%, bulk, unrestricted, Decatur ton. | 69.50 | • | — |
| Soybean oil, crude, tanks, Decatur, lb. | .13¾ | | .13½ |
| Foots, soapstock acid 95%, tanks, New York lb. | .06¼ | | — |
| Soybean oil, alkali, refd., dms lb. | .1785 | | .1815 |
| tanks lb. | .1585 | | — |
| Clarified, dms. lb. | .1735 | | .1760 |
| tanks lb. | .1535 | | — |
| Salad, refd., dms. lb. | .17⅝ | | .17⅞ |
| tanks lb. | .15⅝ | | — |
| Soybean oil acids, dbl. dist., dms., lb. | .16¾ | | .19¼ |
| tanks lb. | .14¼ | | — |
| S. D., dms lb. | .15½ | | .18 |
| tanks lb. | .13 | | — |
| Sparteine sulfate, cns., 100 oz. or more oz. | .80 | • | — |
| Spearmint leaves, dom. bls lb | 75 | | — |
| Spearmint oil, NF, dms lb. | 5.25 | • | — |
| Sperm oil, bleached winter, 45°, dms lb. | .1675 | | .1775 |
| tanks lb. | .1475 | | — |
| Nat., winter 45°, dms lb. | .1575 | | .1675 |
| tanks lb | .1375 | | — |
| Spermaceti wax, blocks, cs lb. | .32 | | .33 |
| Cakes, cs. lb. | .33 | | .34 |
| Spruce oil, cns., dms. lb | 2.10 | | 3.55 |
| Squill, white, bls. lb | .16 | | .18 |
| Powd., bbls., bxs. lb | .17 | | .20 |
| St. John's bread, edible, bls. lb | .17 | | — |
| Stannic chloride, anhyd., dms. works lb. | .829 | - | .849 |
| Stannic oxide, dms., dlvd. lb. | 1.113 | - | 1.133 |
| Stannous chloride anhyd., dms. works lb. | 1.013 | - | 1.368 |
| Hyd., dms., works lb. | .88½ | | .89½ |
| Stannous sulfate, dms., works lb. | 1.079 | - | 1.099 |
| Star root (see Helonias root) | | | |
| Stargrass root (see Aletris root.) | | | |
| Staves acre seed bgs lb | .60 | | .61 |
| Stearic acid, dbl., pressed, bgs lb. | .17¼ | | .19¾ |
| Single-pressed, bgs. lb. | .16¾ | | .19¼ |
| Triple-pressed, bgs. lb. | .19 | • | .21½ |
| Stoddard solvent, petroleum, tanks, east coast, New Jersey, New York gal. | .18 | | — |
| tanks, Houston gal. | .1475 | | — |
| tanks, group 3 gal | 12875 | | — |
| Stramonium leaves, bgs. lb. | .16½ | | .18 |
| Streptomycin sulfate, bulk gram. | .028 | | .03 |
| Strontium bromide, NF, cryst., gran., 150-lb. dm., frt. equald lb. | 1.00 | • | — |
| Strontium carbonate, pure, dms., 5-ton lots or more, works lb. | .35 | • | — |
| dms., 1-ton lots, works lb | .37 | • | — |
| Tech., dms., works lb | .19 | • | — |
| Strontium chromate, fib dms. dlvd. lb. | .48 | • | — |
| Strontium iodide, jars, 25-lb lots lb | 3.57 | • | — |
| Strontium nitrate, bgs. c.l., works, 100 lbs. | 11.00 | • | — |
| bgs., l.c.l., works 100 lbs. | 12.00 | • | — |
| Strontium salicylate, NF, dms lb | 1.88 | • | — |
| Strontium sulfate, air floated, 90%, 325 mesh bgs. works, ton. | 56.70 | | 66.15 |
| Strophanthin G (see Quabain, USP). | | | |
| Strophanthin K, bots. oz. | 25.00 | | 25.50 |
| Strophanthus seed, Kombi, biologically tested, bgs lb. | 2.50 | | 3.00 |
| Styrax gum, USP cs. lb | 4.50 | | 5.50 |
| Styrene monomer, polymer grade, 99.6%, dms., c.l., dlvd lb. | .17 | • | — |
| dms. c.l. same basis lb | .19 | • | — |
| tanks, frt. equald. lb. | .13 | • | — |
| Styrene monomer, tech., 99.2%, dms., c.l., dlvd lb. | .15 | • | — |
| dms., l.c.l., same basis lb. | .17 | • | — |
| tanks, frt. equald lb. | .1099 | | — |
| Above prices are escalated for each calendar quarter on the basis of cost of benzene in the range of 31c. to 34c. a gallon and petroleum refining labor. | | | |
| Styrolyl acetate, bots lb. | 1.03 | | 1.10 |
| Succinic acid, purif., cryst., dms., t.l., frt. alld lb. | .62 | | — |
| dms., t.t.l., same basis lb. | .63 | • | .75 |
| Succinic anhydride, dms. c.l., t.l., dlvd lb. | .51 | • | — |
| dms., l.c.l., same basis lb. | .52 | • | — |
| Sucrose, refd., white, bgs. refy E. lb. | .0955 | | — |
| Sucrose acetate, isobutyrate, 90%, dms. t.l., dlvd lb. | .33½ | | — |
| dms., l.t.l., same basis lb. | .35 | | — |
| tanks, same basis lb. | .31 | | — |
| 100%, t.l., dms., dlvd. lb. | .35½ | | — |
| l.t.l., dms., same basis lb. | .37 | | — |
| Sucrose octa-acetate, denaturing grade, 100-200-lb. lots, bgs. l.c.l. works lb. | 1.00 | | — |
| Sugar (see Sucrose). | | | |
| Sugar cane, wax, dom., refd., slabs, 80-lb ctns., works lb. | .60 | | .65 |
| 80-lb ctns. spot lb. | .65 | | .75 |
| Sulfabenzamide, dms. kilo | 8.80 | | 9.90 |
| Sulfabenzamide-sodium, dms. kilo | 9.00 | | 10.10 |
| Sulfacetamide, USP, fib dms kilo. | 6.61 | | 6.83 |
| Sulfacetamide-sodium USP, fib. dms kilo. | 8.15 | | 9.25 |
| Sulfadiazine, USP, microcrystals, dms kilo. | 23.35 | | 24.45 |
| USP, powd., dms. kilo. | 22.60 | | 23.70 |
| Sulfadiazine-sodium, USP, dms kilo. | 24.80 | | 25.90 |
| Sulfaguanidine, NF X dms kilo | 5.50 | | 6.60 |
| Sulfamerazine, USP, microcrystals, dms kilo. | 23.50 | • | — |
| Sulfamerazine-sodium, USP, powd., dms kilo. | 24.80 | | 25.90 |
| Sulfamethazine, USP XV, microcrystals, dms kilo. | 19.65 | | 20.75 |
| USP XV, powd., dms kilo. | 18.75 | | 19.85 |
| Sulfamic acid, cryst. dms., c.l., t.l., works 100 lbs. | 16.00 | | — |
| dms., l.c.l., t.t.l., works 100 lbs. | 17.50 | | 18.50 |
| Gran., dms., c.l., t.l., works 100 lbs. | 14.75 | | — |
| dms., l.c.l., t.t.l., works 100 lbs. | 16.25 | | 17.25 |
| Sulfanilamide NF reg. 1,000 lb., fib. dms., frt. equald lb. | 1.75 | • | — |
| NF, reg., smaller lots, fib. dms., frt. equald lb. | 1.80 | • | — |
| Sulfanilamide quinoxaline, veterinary dms kilo. | 16.28 | • | — |
| Sulfanilic acid, tech. dms. c.l., frt. alld lb. | .21 | • | — |
| dms., l.c.l., frt alld lb. | .23 | • | — |
| Sulfapyridine, USP XV, powd., bots., tins kilo. | 15.45 | | 16.55 |
| Sulfapyridine-sodium, monohydrate, dms kilo. | 16.55 | | 17.65 |
| Sulfathiazole, NF X, microcrystals, dms kilo. | 6.25 | | 6.90 |
| NF X, powd., dms. kilo. | 5.50 | | 6.15 |
| Sulfathiazole-sodium, NF X, dms., 1,000-lb. lots or more lb. | 2.35 | | — |
| Sulfur, coml., flour, bgs., mines, 100 lbs. | 2.35 | • | — |
| bbls., mines 100 lbs. | 3.30 | • | — |
| lump, bgs., mines 100 lbs. | 2.25 | • | — |
| bbls., mines 100 lbs. | 2.80 | • | — |
| Sulfur, crude, dom. bright, bulk, f.o.b. cars, mines long-ton. | 23.50 | • | — |
| export, f.o.b vessels Gulf ports, long-ton. | 25.00 | • | — |
| US and Canada, f.o.b vessels Gulf ports long-ton. | 25.00 | | — |
| Domestic dark sulfur prices are $1 per long-ton lower | | | |
| Sulfur, crude, imp. Mexican, bulk, filtered, f.o.b., vessel, Coatzacoalcos long-ton. | 24.00 | | — |
| Mexican dark sulfur price is $1 per long-ton lower. | | | |
| Sulfur, refd., flowers, NF, bgs., mines 100 lbs. | 5.65 | • | — |
| bbls., mines 100 lbs. | 7.00 | • | — |
| flour, light, bgs., mines 100 lbs. | 5.25 | • | — |
| bbls., mines 100 lbs. | 6.25 | • | — |
| lump, bgs., mines 100 lbs. | 4.95 | • | — |
| rolls, bgs., mines 100 lbs. | 5.50 | • | — |
| bbls., mines 100 lbs. | 6.25 | • | — |
| salf block, bgs., mines 100 lbs. | 4.65 | • | — |
| virgin block, bbls., mines 100 lbs. | 4.70 | • | — |
| Sulfur, rubbermakers, coml., reg., bgs., mines 100 lbs. | 2.45 | • | — |
| bbls., mines 100 lbs. | 3.70 | • | — |
| 98-100%, passing through 325 mesh, bgs., mines 100 lbs. | 2.55 | • | — |
| bbls., mines 100 lbs. | 3.80 | • | — |
| Refd., bgs., mines 100 lbs. | 4.90 | • | — |
| bbls., mines 100 lbs. | 6.05 | • | — |
| treated, 2.5% mineral oil, bgs., mines 100 lbs. | 2.75 | • | — |
| bbls., mines 100 lbs. | 4.00 | • | — |
| Sulfur dichloride, ret. dms., c.l., works, frt. equald lb. | .05½ | | — |
| ret. dms., l.c.l., same basis lb. | .06¾ | | — |
| tanks, same basis lb. | .04½ | | — |
| Sulfur dioxide, liq. coml., cyls., works, frt. equald lb. | .10 | | .13 |
| multi-unit cars, works lb. | .0535 | | — |
| tanks, works lb. | .045 | | — |
| refrigeration, cyls., dlvd lb. | .33 | • | — |
| Sulfur monochloride, 55-gal. non-ret. dms., c.l., frt. equald lb. | .05½ | | — |
| dms., l.c.l., same basis lb. | .06¾ | | — |
| tanks, same basis lb. | .04½ | | — |
| Sulfuric acid, 60° Be, cbys., c.l., works 100 lbs. | 2.00 | • | — |
| cbys., l.c.l., works 100 lbs. | 2.30 | • | — |
| tanks, works ton. | 18.60 | • | — |
| 66° Be, cbys., c.l., works 100 lbs. | 2.25 | • | — |
| cbys., l.c.l., works 100 lbs | 2.55 | | 3.35 |
| tanks, works ton | 22.35 | • | — |
| 98%, tanks, works, East ton. | 23.50 | • | — |
| 99%, tanks, works, East ton. | 23.70 | • | — |
| 100%, tanks, works, East ton. | 23.95 | • | — |
| Sulfuric acid, California works, tanks ton. | 26.45 | • | — |
| CP, NF, consumers' cbys., c.l., frt. equald lb. | .12¾ | | — |
| Consumers' cbys., l.c.l., same basis lb. | .14¼ | | .14¾ |
| 5-pt. bots., extra, cs., c.l., works, frt. alld lb. | .16¼ | | — |
| 5-pt. bots., extra, cs., l.c.l., same basis lb. | .17¾ | | .18¾ |
| Sulfuric acid, fuming (oleum), 20% tanks, works ton. | 25.00 | • | — |
| 40%, tanks, works ton. | 29.00 | • | — |
| 65%, tanks works ton. | 39.50 | • | — |
| Superphosphate, run-of-pile under 22% a.p.a., pulv., bulk, c.l., Baltimore unit-ton. | .90 | | .93 |
| bulk, c.l., Carteret, N. J. unit-ton. | .90 | | .93 |
| Superphosphate, triple, 48% or more a.p.a., pulv., bulk c.l. East Tampa, Fla., unit-ton. | 1.00 | • | — |
| bulk, f.o.b. vessel at Fla unit-ton. | 1.05 | • | — |
| Sweet birch oil, USP, northern, cns lb. | 4.00 | | 9.50 |
| USP, southern, cns lb. | 2.00 | | 3.05 |

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| 2,4,5-T, dms., c.l., works, frt. equald. lb. | 1.18 | • | — |
| dms., l.c.l., same basis lb. | 1.25 | • | — |
| 2,4,5-T, isopropyl ester, dms., c.l., works, frt. equald lb. | 1.24 | • | — |
| dms., l.c.l., works lb. | 1.29 | • | — |
| Talc, dom., fibrous, grd., bgs., c.l., works, New York ton. | 28.00 | | — |
| bgs. l.c.l., works ton. | 31.00 | | 36.00 |
| fibrous, 99.5%, 325 mesh, bgs., c.l., works, New York ton. | 31.00 | | — |
| bgs., l.c.l., works ton. | 34.00 | • | — |
| Talc, dom., fibrous, 99.95%, 400 mesh, micronized bgs., c.l works ton. | 38.00 | • | — |
| 625 mesh, micronized, bgs., c.l. works ton. | 80.00 | | — |
| Talc, dom., ord., Calif., grd., bgs., c.l., works ton. | 34.00 | | 39.50 |
| Vermont, off-color, grd., bgs., c.l., works ton. | 19.40 | | — |
| bgs. l.c.l., works ton. | 37.00 | | — |
| imp., Canadian, grd., bgs., c.l., mines ton. | 20.00 | | 35.00 |
| tanks, works lb. | .02⅞ | | .03⅛ |
| Tall oil, crude, tanks, works lb. | .03 | | .03¼ |
| Dist. depending on grade, dms., c.l., works lb. | .07 | | .09¼ |
| tanks, works lb. | .05¼ | | .08 |
| Refd., depending upon grade, dms., c.l., works lb. | .07¾ | | .08¼ |
| tanks, works lb. | .06½ | | .07½ |
| Tall oil acids, dms., c.l., works lb. | .07 | • | .10 |
| dms., l.c.l., works lb. | .07½ | | .10½ |
| tanks, works lb. | .05 | • | .07½ |
| Tallow, edible, tanks, dlvd lb. | .11 | • | — |
| Inedible, fancy, bleachable, tanks, lb. | .08½ | | .08⅝ |
| fancy, guaranteed, bulk, f.o.b. steamer lb. | .09½ | | Nom. |
| dms., f.a.s. lb. | .10½ | | Nom. |
| tanks, dlvd. lb. | .09 | • | .09⅛ |
| No. 1, dlvd. lb. | .07⅞ | | .08 |
| Prime, tanks, dlvd. lb. | .08¼ | | .08¾ |
| Special tanks, dlvd. lb. | .08 | • | .08⅛ |
| Sulfonated, 25%, bbls., l.c.l. lb. | .08½ | | .08¾ |
| 50%, bbls., l.c.l. lb. | .10½ | | .11 |
| Tallow acids, dist., dms. lb. | .13¾ | | .16¼ |
| tanks lb. | .11¼ | | — |
| Hydrogenated, dms. lb. | .16 | • | .18½ |
| Tallow oil, acidless, dms., c.l. lb. | .14 | • | — |
| dms., l.c.l. lb. | .16 | • | — |
| tanks lb. | .12½ | | — |
| Tangerine oil, Florida, dms lb. | 4.75 | | — |
| Tankage, animal, feeding, 9-11% ammonia, New York bulk unit-ton. | 4.75 | | 5.00 |
| Tannic acid, NF, fluffy, bbls., 1,000-lb lots lb | 2.05 | | — |
| bbls., smaller lots lb | 2.06 | | 2.07 |
| powd., bbls., 1,000-lb. lots lb. | 1.95 | • | — |
| bbls., smaller lots lb. | 1.96 | | 1.99 |
| Tech., dms lb. | 1.05 | | — |
| Tansy oil, dms lb. | 6.60 | | 8.00 |
| Tar acid oil, 15-18%, dms., c.l., dms., l.c.l., same basis gal. | .55½ | | — |
| tanks, same basis gal. | .43½ | | — |
| 25-28%, dms., c.l., frt. equald gal. | .53½ | | — |
| basis gal. | .60 | | — |
| dms., l.c.l., same basis gal. | .62 | • | — |
| tanks, same basis gal. | .50 | • | — |
| 50-53%, dms. c.l., same basis gal. | .75 | • | — |
| dms., l.c.l., same basis gal. | .77 | • | — |
| tanks, same basis gal | .65 | | — |
| Tar, coal (see Coaltar). | | | |
| Tartar emetic (see Antimony potassium tartrate). | | | |
| Tartaric acid, NF, 100-lb bgs., c.l., frt. equald lb. | .41 | | — |
| bgs., 10,000 lbs. 1 shipt., same basis lb. | .43 | • | — |
| bgs., smaller lots, same basis lb. | .47 | • | — |
| Terpine hydrate, NF, cryst., powd., 100-lb. fib. dms lb. | .70 | • | — |
| Terpineol, extra, dms lb. | .50 | | .60 |
| Prime, dms. lb. | .40 | | .50 |
| Terpinyl acetate, extra, cns., dms., lb. | .64 | | .75 |
| Prime, dms lb | .53 | | .56 |
| Terpinyl propionate, dms lb. | 1.65 | | 1.70 |
| Testosterone, USP, bots. gram | No prices. | | |
| Testosterone propionate, USP, bots. gram. | No prices. | | |
| Tetrachloroethane, dms., works lb. | .14½ | | — |
| Tetrasodium pyrophosphate (see Sodium pyrophosphate) | | | |
| Tetrachlorethylene, tech. (see Perchloroethylene) | | | |
| Tetrachloroethylene, USP, 55-gal. dms., c.l., t.l., works lb. | .20½ | | — |
| dms., l.c.l., works lb. | .22 | | .23½ |
| Tetraethyl orthosilicate, dms., c.l., dlvd. E lb. | .60 | | — |
| dms., l.c.l. dlvd. E lb. | .61½ | | — |
| Tetraethyl pyrophosphate, 40%, cns., dms., frt equald lb. | .75 | | — |
| Tetraethylenepentamine, dms., c.l., dlvd. E lb. | .53½ | | — |
| dms., l.c.l., dlvd. E lb. | .55 | • | — |
| tanks, dlvd. E lb. | .51 | • | — |
| Tetraethylthiuram disulfide, tech., dms., frt. alld lb. | 1.04 | • | — |
| Tetrahydrofuran, dms., c.l., t.l., works lb. | .36½ | | — |
| dms., t.c.l., or t.t.l., works lb. | .37 | • | — |
| tanks, works lb. | .35 | • | — |
| Tetrahydrofurfuryl alcohol, dms., c.l., t.l., Memphis, Tenn. lb. | .31½ | | — |
| dms., t.c.l., Memphis, Tenn lb. | .32½ | | — |
| dms., c.l., t.l., Newark, N.J lb. | .33½ | | — |
| Tetrahydrofurfuryl alcohol, dms., l.c.l., Newark, N. J. lb. | .28½ | | — |
| tanks, dlvd. E. of Denver lb. | .25 | • | — |
| tanks, dlvd. W. of Denver lb. | .26 | • | — |
| Tetrahydrophthalic anhydride dms., c.l., t.l., frt. alld E lb. | .39 | • | — |
| t.c.l., t.t.l., same basis lb. | .41 | • | — |
| Tetrapotassium phosphate (see potassium phosphate) | | | |
| Thallium metal, dlvd lb. | 7.50 | | 10.00 |
| Thallium sulfate, 99%, bots., dlvd. lb | 5.00 | | 10.00 |
| Theobromine, NF, fib dms. 100-lbs., f.o.b., works lb. | 4.10 | | 4.15 |
| Theobromine and sodium acetate, USP, fib dms. 500-lbs. works lb. | 6.45 | • | — |
| Theobromine, sodio-salicylate, NF, fib dms., 500-lbs. works, lb. | 3.80 | • | — |
| Theophyline, USP, anhyd. 100-lb. dms., frt alld lb | 3.65 | • | — |
| Thiamine hydrochloride, USP fib dms., frt alld kilo. | 36.00 | • | — |
| USP, ampule grade, fib. dms., frt alld kilo. | 38.00 | • | — |
| Thiamine mononitrate, USP, fib dms. frt alld kilo. | 36.00 | • | — |
| Thiocarbanilide, dms., ton lots lb. | 74 | • | — |
| dms., less ton lots lb. | 76 | • | — |
| Thiodiphenylamine (see Phenothiazine). | | | |
| Thioflavin green toner, brilliant, molybdated, PMA, kgs., works lb | 5.20 | • | — |
| Tungstated, PTMA, kgs. works lb | 6.20 | • | — |
| Thioglycolic acid, refd., 55 gal dms., ton lots, 100% basis lb. | 1.15 | • | — |
| Thiosalicylic acid, 80% dms., 1,000-lb., lots, works lb. | 4.00 | • | — |
| Thiourea, tech. bgs. t.l. frt alld. lb. | .30 | • | — |
| bgs., ton lots, same basis lb. | .32 | • | — |
| bgs., less than ton lots, same basis lb. | .33 | • | — |
| Thorium nitrate, purif., fib dms., 100-lb lots or more, works lb. | 3.50 | • | — |
| dl-Threonine, dms., 25 kilos, works, kilo. | 115.00 | • | — |
| Thyme leaves, French, triple sifted extra, bgs lb. | .27 | • | — |
| Spanish, extra, bgs lb. | .12 | • | — |
| triple sifted, bgs lb. | .25 | • | — |
| Spanish, bgs. lb. | .09 | • | — |
| Thyme oil, NF, red, cns., dms. lb. | 2.00 | • | — |
| NF, white, cns lb. | 2.20 | • | — |
| Tech., white, cns. lb. | .40 | | 1.85 |
| Thymol, fib dms., 25-lbs., f.o.b. works lb. | 2.45 | | — |
| Thymol iodide, NF, dms. 100-lbs f.o.b. works lb | 7.30 | • | — |
| Timbo root (see Cube root) | | | |
| Tin chloride (see Stannous chloride, anhyd.) | | | |
| Tin crystals (see Stannous chloride, hydrous) | | | |
| Tin metal (Straits) lb. | 1.05 | • | — |
| Tin oxide (see Stannic oxide). | | | |
| Tin sulfate (see Stannous sulfate). | | | |
| Tin tetrachloride anhyd. (see Stannic chloride, anhyd.) | | | |
| Titanium dioxide, anatase, ceramic, bgs., c.l., dlvd lb. | .25½ | | — |
| bgs., t.c.l., dlvd. lb. | .26½ | | — |
| reg., bgs., c.l., dlvd. lb. | .25½ | | — |
| bgs. t.c.l. dlvd. lb. | .26½ | | — |
| metallurgical, nat., bgs., c.l., f.o.b Jacksonville Fla. ton. | 180.00 | • | — |
| Titanium dioxide, metallurgical, nat., bgs., 5-ton lots, Niagara Falls, N. Y ton. | 205.00 | • | — |
| bgs. ton lots same basis ton. | 215.00 | • | — |
| Milled metallurgical titanium dioxide $7.50 per ton higher | | | |
| Titanium dioxide, rutile, nonchalking, bgs., c.l., dlvd E lb. | .27½ | | — |
| bgs. l.c.l., dlvd E lb. | .28½ | | — |
| Titanium dioxide-calcium pigment, 30% Ti $O_2$, reg., bgs., c.l., dlvd lb. | .09⅜ | | — |
| bgs., t.c.l. works lb. | .09⅞ | | — |
| 50% Ti $O_2$, high-tinting, dms. c.l., lb. | .14⅜ | | — |
| dms. t.c.l. lb. | .14⅞ | | — |
| Titanium hydride, powd., dms., works lb. | 8.10 | | 9.00 |
| Titanium tetrachloride, tech., dms., c.l., works lb. | .26 | | — |
| dms., t.c.l., works lb. | .27½ | | .29 |
| tanks, works lb. | .20 | | — |
| Tobias acid, dms., c.l., t.l. lb. | .81 | • | — |
| dms., l.c.l. lb. | .84 | • | — |
| d-a-Tocopherols, NF, mixer, conc. pure basis, bots kilo. | 67.00 | | — |
| d-a-Tocopheryl acetate, NF, conc., pure basis, bots kilo. | 122.00 | • | — |
| d-a-Tocopheryl acid succinate, cryst., bots kilo. | 109.00 | | — |
| dl-a-Tocopherol, bots. kilo. | 99.00 | | — |
| dl-a-Tocopheryl acetate, bots kilo. | 90.00 | | — |
| 25% dry. powd., bots kilo. | 22.50 | | 24.00 |
| 33⅓% dry. powd. bots. kilo. | 30.00 | | 31.50 |
| o-Tolidine base, dry, kgs., 100% basis lb | 1.55 | • | — |
| Paste, kgs. 100% basis lb. | 1.50 | | — |

**TOLUOL**

**Toluol quotations, both coaltar and petroleum, may be found under Toluene.**

| | | | |
|---|---|---|---|
| o-Tolidine hydrochloride paste, kgs., 100% basis lb. | 1.50 | • | — |
| Tolu balsam, cns lb. | 4.00 | • | — |
| Toluene, coaltar, indust., or nitration, tanks, dlvd. E. of Rockies gal. | .25½ | | — |
| Toluene, petroleum indust., tanks, f.o.b., frt. equald gal. | .25 | • | — |
| p-Toluenesulfonamide, powd., dms., t.l., works lb. | .60 | • | — |
| dms., t.t.l., same basis lb. | .63 | • | — |
| Toluenesulfonic acid, 55-gal. dms., t.l., frt. alld lb | .16 | | — |
| 1,000-lb or more, same basis lb. | .18 | | — |
| less than 1,000-lb., same basis lb. | .23 | | — |
| tanks, same basis lb. | .14 | | — |
| Toluenesulfonic acid in 10-gal. dms., 2c per lb more. | | | |
| p-Toluenesulfonic acid mononydrate, dms., c.l., or t.l lb | .90 | | — |
| dms., 125 lbs to t.l. lb | 1.00 | | — |
| m-Toluidine, dms. c.l., works, frt. alld lb | .83 | | — |
| dms., t.c.l., same basis lb | .84 | | — |
| tanks, same basis lb. | .82 | • | — |

o-Toluidine, dms., c.l., works, frt. alld lb. .30 • —
dms., t.c.l., same basis lb. .31 • —
tanks, same basis lb. .28 • —
p-Toluidine, tech., flake, dms., frt. alld lb. .50 • —
Cast, dms., frt. alld. lb. .45 • —
p-Toluidine-m-sulfonic acid, dms., works lb. .92 - 1.04
Toluidine red toner, deep shades, kgs., works lb. 1.70 • —
Light shades, kgs. works lb. 1.70 • —
2,4-Tolylenediamine, cryst., fib. dms., t.c.l., frt alld lb. 1.10 • —
Tonka beans, Angostura, cks. lb. 1.50 • —
Brazilian, Surinam, cs. lb. 1.30 • —
Totaquine, 100-oz lots, cns. oz. .42 • —
Toxaphene dms., c.l., t.l., works, lb. .22 • —
dms., t.c.l., t.t.l., works lb. .28 • —
Tragacanth gum, No. 1, ribbons cs lb. 4.10 4.20
No 2, cs. lb. 3.75 3.80
No. 3, cs. lb. 3.40 3.65
USP, powd., bbls. lb 1.05 1.15
Triacetin, dms., c.l., divd, E. of Rockies lb .39 — —
dms., t.c.l., same basis lb .40 • —
tanks, same basis lb .37 • —
Triallylamine, dms., c.l., divd lb .965 • —
dms., t.c.l., divd. lb. .995 • —
tanks, divd lb .96 • —
Tributyl citrate, tech., non-ret. dms., c.l., frt alld E of Denver, lb. .42½- —
non-ret dms. t.c.l., frt alld. E. of Denver lb. .43½- —
tanks, frt alld E of Denver lb. .40 — —
Tributyl phosphate, dms., c.l. works, lb. .52½- —
dms. t.c.l., same basis lb. .53½- —
tanks, same basis lb. .50 — —
Tributylamine dms., c.l., works lb. .67½- —
dms., t.c.l., same basis lb. .69 • —
tanks, same basis lb. .65 • —
Tributyrin dms. t.c.l. divd lb .69 • —
Trichloroacetic acid, tech., 300-lb. dms. c.l., f.o.b works lb. .52 • —
USP, 100-lb dms., frt. equald lb. 1.25 • —
Trichlorobenzene dms. c.l. frt alld. E lb. .15 — —
dms., t.c.l. frt. alld. E. lb. .16 • —
tanks, frt. alld. E. lb. 13¼- —
Trichlorobenzene prices in the West 1¼c. higher
1,1,1-Trichloroethane, dms., c.l., divd. lb. .13¼ • —
dms., t.c.l., divd lb. .16 • —
tanks, divd lb. .12¼- —
1,1,2 Trichloroethane, dms., c.l., works lb. .15½- —
dms., t.c.l., works lb. .16¼- —
tanks, works lb. .13½- —
Trichloroethylene dms. c.l., or t.l., divd lb. .12½- —
dms., t.c.l., divd. lb. .14 - .14½
tanks, divd. lb. .11¼- —
Trichloroisocyanuric acid dms., c.l., t.l., frt. equald lb. 65 • —
dms. t.c.l. same basis lb 75 • —
Trichlorophenoxyacetic acid (see 2,4,5-T).
Tricholine citrate, 65% soln., ret. chys. works, frt adjusted, lb. 1.40 - 1.45
Tricresyl phosphate, coaltar, dms., c.l., divd lb. .35 • —
dms., t.c.l., divd. lb. .36 • —
tanks, divd lb. .32½- —
Tricresyl phosphate, petroleum, dms., c.l., divd lb. .35 • —
dms., t.c.l. divd. lb. .36 • —
tanks divd lb. .32½- —
Tridecyl alcohol, mixed isomers, dms. c.l. divd. E lb. .26½- —
dms., t.c.l., divd. E lb. .28 • —
tanks, divd E lb. .24 • —
Triethanolamine dms. c.l., divd E, lb. .24½- —
dms., t.c.l., same basis lb. .26 • —
tanks, same basis lb. .22 • —
Triethanolamine lauryl sulfate, dms., c.l., t.l., frt. alld lb. .25½- —
dms. t.t.l. frt alld. lb. .26½- —
tanks, frt alld lb. .24½- —
Triethylamine dms. c.l., divd E. lb. .50 • —
dms., t.c.l., same basis lb. .51½- —
tanks, same basis lb. .47½- —
Triethyl citrate, refd., tech., non-ret dms., c.l., frt. alld E. of Denver lb. .46¼- —
non-ret dms., t.c.l., frt alld. E. of Denver lb. .47¼- —
tanks, frt alld E of Denver, lb. .43¾- —
Triethyl phosphate, dms., c.l., divd. lb. .40½- —
dms., t.c.l., divd. lb. .42 • —
tanks, divd lb. .38 • —
Triethylene glycol, dms., c.l., divd. E lb. .21 • —
dms., t.c.l., divd. E lb. .22½- —
tanks, divd. E lb. .18½- —
Triethylenetetramine, dms., c.l., divd. E lb. .51½- —
dms., t.c.l., divd E lb. .53 • —
tanks, divd E lb. .49 • —
Triisobutylene, tanks, divd. lb. .08 — —
Tri-isopropanolamine, dms., c.l., divd. E lb. .23¼- —
dms. t.c.l. divd E lb. .24¾- —
tanks, divd E lb. .20¾- —
Trimethylamine anhyd., cyls., t.c.l., frt. equald, 100% basis lb. .30 .305
tanks frt equald 100% basis, lb. .26 • —
25-40% soln. dms., c.l., frt. equald, 100% basis lb. .35 • —
dms. t.c.l. frt. equald, 100% basis lb. .35½- —
tanks, 100% basis, frt equald lb. .26 • —
Trimethylolpropane, dms., c.l., t.l., divd. E lb. .30½- —
dms., t.c.l., t.t.l., same basis lb. .31½- —
Trioxanes, pure, dms., c.l., t.l., works lb. .50 • —
dms. t.c.l. works lb. .51½- —
Tripentaerythritol, bgs., c.l., t.l., divd. E lb. .34 • —
bgs., t.c.l., t.t.l., divd. E lb. .35 • —
Triphenyl phosphate, bbls., c.l., frt. equald lb. .41¼- —
bbls. t.c.l. frt equald lb. .43½- —
Triphenylguanidine, bbls., works lb. .90 • —
Tripropylene dms., c.l., divd. E gal. .44 • —
dms., t.c.l., same basis gal. .54 • —
tanks, same basis gal. .26 • —
Tripropylene glycol, dms., c.l., t.l., frt alld E lb. .30½- —
dms., t.c.l. t.t.l. frt. alld. E lb. .22 • —
tankcars and compartmented tankcars, frt alld E lb. .17½- —
tankwagon and compartmented tankwagon, 1,000 gals., min. frt. alld. E lb. .18 • —
Tripropylene glycol prices 1c. per lb. higher in west
Trisodium phosphate (see Sodium phosphate tribasic).
dl-Trypophane, dms., 1 kilo, works, kilo. 154.00 • —
Tung oil, dms., New York lb. .38¾- .29½
tanks, imported lb. .27½- .27½
tanks, domestic, mills lb. .27½ Nom.
Tungsten metal powd., 2.0-2.5 microns, dms., works lb 4.25 • —
Tungstic acid, tech. dms., 1,000-lb. lots, works lb 2.23 • —
dms., smaller lots, works lb 2.45 • —

Turkey red, bbls., works lb. .33 • —
Turpentine, gum (see Protective Coatings market, Naval Stores).
Turpentine oil, NF, cns., dms lb. .28 .50
Tuscan red, bbls., frt. equald lb. .26 • .33
Tyrothricin, USP, 1 to 5 kilos gram. .50 • —

## U

Ultramarine blue, cobalt type, dry or pulp, 250-lb. bbls., divd. E. of Rockies lb. .30½- .35
Jobbing types, dry, bbls., same basis lb. .16 - .22½
Regular types, dry bbls., same basis lb. .16 - .37½
Ultramarine blue prices 1c higher W. of Rockies.
Umber pigment, burnt, American, bgs., c.l., works lb. .07½- .07¾
bgs., t.c.l. works lb. .07¾- .08
turkey-type, bgs., c.l., Boston, Bethlehem, Easton, Pa., Hiwassee, Va., N.Y. lb. .08¼- —
Raw, American, bgs., works lb. .07¾- .08¼
Turkey-type, bgs., works lb 08½- .08¾
Undecylenic acid 55-gal dms., f.o.b. works lb. 1.28 • —
Unicorn root, false (see Helonias root).
Unicorn root, true (see Aletris root).
Urea 46% N, indust. bgs., c.l. t.l., f.o.b. plant ton.100.00 • —
Feed grade, c.l., t.l., f.o.b. plant, ton.95.00 • —
45% N, agricultural, bgs., c.l. f.o.b. plant ton.92.50 • —
Bulk, c.l., t.l., same basis ton.86.50 • —
Urea-ammonia liquor A, B C & F grades, N basis, tanks frt. equald ton.120.00 • —
37 grade, tanks, same basis ton.145.00 • —
Urethane, USP, dms., t.l., f.o.b., works lb .65 • —
dms., t.t.l., same basis lb. .70 • —
Uva-ursi leaves, bls lb. .12 • —

## V

Valerian root, Belgian bgs. lb .32 • —
Indian, bgs. lb .25 • —
dl-Valine, dms., 1 kilo, works kilo. 37.00 • —
Vanadium pentoxide, tech. dms., works lb. 1.38 • —
Vandyke brown, bbls., works lb .09½- .12
Vanilla beans, Bourbon, tins lb. 6.90 - 7.10
Mexican cuts, tins lb. 7.10 - 7.40
whole, tins lb. 7.50 - 8.50
Vanillin ex lignin, 100-lb. fib. dms., 2,000-lb. lots or more lb. 3.00 • —
less than 2,000 lbs lb. 3.20 3.30
Venetian red, jobbing, bgs. works, lb. .0475- —
Venetian red, 20%, bgs., works lb .0525- —
25%, bgs., works lb .0575- —
30%, bgs., works lb .06 • —
35%, bgs., works lb .0625- —
40% bgs. works lb .0675- —
Vetiver oil, Bourbon, cns lb. 17.00 -17.25
Haitian, cns. lb. 12.00 -14.00
Victoria blue toner, molybdated, PMA 250-lb. bbls., divd. E. of Rockies lb 4.50 4.95
Tungstated, PTMA, 250-lb bbls., divd. E. of Rockies lb 5.55 —
Victoria blue toner, bbls. prices 1c. higher W. of Rockies

Vinyl acetate monomer, zone 1 55-gal. dms., c.l., divd lb .1810 —
55-gal dms. t.c.l., divd lb .1960 —
tanks, divd. lb 1560 —
tanktrucks less than 4,000 gal. divd lb. .1610 —
Vinyl n-butyl ether, tech dms. t.c.l., works lb 50 —
Vinyl chloride monomer, tanks works, min. frt. equald E. lb. .0896- —
Vinyl ether, USP, anethesia, bots., 50cc., hospitals bot 1.12 —
bots. 75cc. hospitals bot 1.56 —
Vinyl ethyl ether tech. dms., c.l., works lb .30¼ —
dms., t.c.l., works lb .31 —
tanks, works lb 28¼ —
Vinyl propionate monomer, dms. c.l., divd lb 49 —
dms. t.c.l., same basis lb 50 —
tanks, same basis lb 47 —
Vinyl trichloride (see Trichloroethane)
2-Vinylpyridine, 10 dms to tanks, works lb 1.20 —
1 to 9 dms., works lb 1.35 —
tanks, works lb 1.15 —
Vinyltoluene, dms., c.l., f.o.b., works lb. 16½ —
dms., t.c.l., same basis lb. 18½ —
tanks, f.o.b dest. frt. prepaid lb. .14 —
Viosterol in nat. vegetable oil, 1,000,000 D units per gram, bots., lots of 10 billion USP units 1,000,000 units 02½- —
Virginia type red, bbls., works lb 1.40 —

Toluic Acids provide ideal intermediates for the manufacture of aromatic esters, amides, acid chlorides, nitrile and anhydride compounds. Cowles' facilities for large-scale production of m-Toluic, o-Toluic and p-Toluic acids make it possible to produce specially formulated esters and metallic salts of the Toluics where commercial quantities are indicated.

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Cleveland 3, Ohio

Vitamin A acetate, syn., cryst., beads 500,000 A units per gram gram .07¼ -
Vitamin A acetate dry, 500,000 units per gram, kilo lots kilo.65.00 -
325,000 units per gram, same basis kilo 43.88 -
250,000 units per gram, same basis kilo.33.75 -
Dry vitamin A acetate in less than kilo lots, $1.25 to $2.50 per kilo higher
Vitamin A, liq in oil, 1,000,000 A units per gram 1,000,000 units. .09½ -
Vitamin A palmitate liq., 1,000,000-1,800,000 A units per gram 1,000,000 units. 09½ -
Vitamin $B_1$ (see Thiamine hydrochloride).
Vitamin $B_2$ (see Riboflavin and Yeast).
Vitamin $B_{12}$, cryst., USP (cyanocobalamin) 1-50 grams vials, tins gram.45.00 - -
Vitamin $B_{12}$, 0.1% vitamin $B_{12}$, USP, adsorbed on gelatin, 100 and 500-gram bots on 1-5 kilo, dms., gram. .57 - -
Vitamin $B_{12}$, 0.1% vitamin $B_{12}$, USP, adsorbed on resin, 100 and 500-gram bots., 1-5 kilo dms. gram. .57 - -
Vitamin $B_{12}$, oral grade solids in containers of 1 and 10 gram of $B^{12}$ activity gram.52.00 - -
0.1% trituration of cryst., $B_{12}$ with dicalcium phosphate or mannitol, 1-10 kilo.52.00 - -
0.1% trituration of cyanocobalamin, USP, with dicalcium phosphate or mannitol gm.52.00 - -
USP solution of cyanocobalamin (5,000 micrograms per cc.), 5-gram bots gram.52.00 - -
Vitamin $B_{12}$, 0.1% cobalamin concentrate, NF, adsorbed on resin, 500-gram bots., 1-5 kilo dms., frt. alld. gram. .57 - -
0.1% cobalamin concentrate in gelatin 1-10 kilo dms., frt. alld. gram. .57 - -
Vitamin C (see Ascorbic acid).
Vitamin $D_2$ (see Codliver and Fishliver oils, Calciferol and Viosterol).
Vitamin D, dry, 850,000 units per gram, kilo lots kilo.42.50 - -
850,000 units per gram less than kilo lots kilo.45.00 -
Vitamin E (see a-Tocopherol and Wheat germ oil).
Vitamin H (see Biotin).
Vitamin K, active (see Menadione).
Vitamin $K^1$, 25-gram lots gram. 4.50 - -
Violet methyl toner (see Methyl violet toner).
VM&P naphtha (see Naphtha, VM&P, petroleum).

## W

Wahoo root bark, bls. lb. 2.00 2.25
Warfarin, 0.5%, dms., 50-lb. lots, dlvd lb. 1.95 - -
dms. 25-49-lb. lots, New York or Chicago lb. 2.05 - -
dms. 5-24-lb lots, New York or Chicago lb. 2.15 - -
Watchung-type reds., bbls lb. 1.95 - -

**WAXES**
Wax quotations are listed individually. For example, prices on Wax, carnauba, may be found in the C's under Carnauba wax.

Wheat germ oil, 5-gal. dms. gal.12.25 -
White lead (see Lead, white).
White mineral oil (see Mineral oil, white).
White pine bark, rossed, bls. lb .21 - .22
White precipitate, USP, powd., dms., 100 lbs. f.o.b works lb 5.50 - -
Whiting (see Calcium carbonate)
Wild cherry bark, thin, nat., bls lb. .30 - -
Wintergreen oil, USP nat northern, cns lb. 6.35 -17.50
USP, nat southern cns lb. 3.75 7.00
Wintergreen oil, syn. (see Methyl salicylate).
Witch hazel bark, bls lb. .30 .35
Witch hazel leaves, bls lb. .75 - .80
Wollastonite, fine paint grade, bgs., c.l., works ton.41.00 - -
bgs., l.c.l., ex whse ton.51.00 - -
medium paint grade, bgs., c.l., works ton.29.00 - -
bgs., l.c.l., ex whse. ton.39.00 - -
Wood alcohol (see Methanol).
Wood oil (see Tung oil).
Woolfat crude (see Degras).
Woolfat USP (see Lanolin).
Wormseed Levant bgs lb 2.50 - -
Wormseed oil (see Chenopodium oil NF).
Wormwood oil, cns lb. 4.75 - -

## X

Xylene, coaltar, indust., tanks, works:
Bethlehem, Pa. gal. .29 - -
Birmingham dist. gal. .29 - -
Chicago dist. gal. .28½ - -
Cleveland dist. gal .29 - -
Geneva, Utah gal. 29 - -
Johnstown, Pa. gal 29 - -
Lackawanna, N.Y. gal. .29½ - -
Lone Star, Tex. gal 27 - -
Lorain, Ohio gal. 29 - -
Middletown, Ohio gal 30 - -
Minnequa, Col. gal. 29 - -
Philadelphia dist. gal. 29 - -
Pittsburgh dist. gal 29 - -
Sparrows Point, Md. gal 29 - -
Terre Haute, Ind. gal 29 - -
Youngstown, Ohio gal 29 - -
Xylene, petroleum, indust., tanks f.o.b works:
Bayonne N. J gal 29 - -
Baytown, Tex. gal. .27 - -
Charleston, S. C. gal. 29 - -
Chicago, Ill gal. 28½ - -
Detroit, Mich., dlvd gal. 27½ - .29
Houston, Tex. gal. 27 - -
Philadelphia, Pa. gal. 29 - -
Providence, R. I. gal. 30 - -
Sewell's Point, Va. gal. 28 - -
Wood River, Ill gal .28½ - -
m-Xylene, 95%, dms., c.l., f.o.b., Richmond, Calif lb. .21 - -
dms. l.c.l., f.o.b., Richmond, Calif lb .22 - -
tanks, frt. alld. lb. .19 - -
o-Xylene, dms., c.l., works lb .08 - -
dms. l.c.l., works lb .09 - -
tanks, works lb .06 - .06½
p-Xylene dms., c.l., works lb .20 - -
dms., l.c.l., works lb. .21 - -
tanks, frt. alld. lb. .1645 - -
Xylenol cryst., 45°-47°C., m.p., dms., l.c.l., works, frt. equald lb. .23 - -
96°-58°C., m.p., dms., l.c.l., works, frt. equald lb .33 - -
60°-62°C., m.p., dms., l.c.l., same basis lb. .40 - -
Xylenol fraction, b.r. 7°-9° C., dry above 227° C., dms., c.l., same basis gal. 1.25 - -
dms., t.c.l., same basis gal. 1.30 - -
tanks, same basis gal. 1.05 - -
b.r. 7°-9° C., dry at or below 227° C., dms. c.l., same basis, gal. 1.35 - -
Xylenol fraction, b.r 7°-9° C., dry at or below 227° C., dms., t.c.l., same basis gal. 1.40 - -
2,4-Xylidine, tech., dms., frt. alld. lb. 1.15 - -
2,5-Xylidine, tech., dms., frt. alld. lb. 1.20 - -
Xylidines, mixed, o-m-p, dms., c.l., or t.l., works lb .39 - -
dms., t.c.l., same basis lb .40 - -
tanks, same basis lb. .38 - -

**XYLOL**
Xylol quotations, both coaltar and petroleum, may be found under Xylene.

## Y

Yara yara oil, cns. lb. 2.15 3.05
Yeast, brewers, debittered, USP XV, Saccharomyces dlvd lb. .27 - -
primary, USP XV, 150 meg. $B^1$ per gram, 100-lb. dms lb. .47 - -
USP XV, 270 mcg. $B_1$ per gram, 100-lb dms lb. .52 -
Yeast, brewers, primary, USP, XV, 300 mcg., $B_1$ per gram, 100-lb. dms lb. .56 - -
USP XV, 900 mcg., $B_1$ per gram 100-lb. dms. lb. .60 - -
Torula, USP, dlvd. lb. .18 - -

**YELLOW PIGMENTS**
Yellow pigment quotations are listed individually. For example, prices on Yellow, benzidine, may be found in the B's under Benzidine yellow

Yerba santa leaves, bls. lb. .40 .45
Ylang Ylang oil, Bourbon, bots. lb. 7.00 -22.00
extra, bots lb.24.00 -33.00
Yohimbine hydrochloride, bots., tins. oz. 3.75 4.25

## Z

Zein, 50-lb. bgs., c.l., t.l., f.o.b. works lb. .37 - -
50-lb. bgs., smaller lots, f.o.b. works lb. .41 - .44
Zinc acetate, NF, VIII, dms lb. .53 - -
Tech., dms., l.t.l., works lb. .2950- -
Zinc borate bgs., 1,000 lbs or more, works lb. .25 - -
bgs. less than 1,000 lbs., same basis lb. .27 - -
Zinc chloride, NF, gran., dms lb. .42 - -
NF precip., powd., dms lb. .26 - -
Tech. anhyd. 50%, dms., c.l., works 100 lbs. 5.80 - -
dms., t.c.l., works 100 lbs 6.40 - -
tanks, works 100 lbs 5.15 - -
fused dms. c.l. works 100 lbs.10.70 - -
dms., t.c.l., works 100lbs.11.20 - -
Zinc Chloride, tech. gran., fib. dms., c.l., works 100 lbs.11.45 - -
fib dms., t.c.l., works 100 lbs.11.95 - -
Zinc chromate bbls., dlvd. lb. .29 - -
Basic bbls., dlvd. lb. .24 - -
Zinc cyanide, dms., 1,000-lb. lots or more, works lb. .55 - -
dms., smaller lots, works lb. .57 - -
Zinc dust coml. bbls., c.l., works. lb. .16 - -
Pigment, bbls., c.l., works lb. .15½ - -
bbls., l.c.l., works lb. .17¼ - -
Zinc fluoride, bbls., works lb. .49 - .50
Zinc hydrosulfite, dms., c.l., frt. alld lb. .21½ - -
dms., t.c.l., frt. alld. lb. .23½ - -
Zinc metal, prime western, slabs, E. St. Louis lb. .11½ - -
Prime western slabs, New York. lb. .12 - -
Zinc naphthenate liq. 8% Zn., dms., frt. alld lb. .27 - -
10% Zn., dms., frt. alld. lb. .33 - -
Zinc nitrate, tech., flake, 100-lb. fib. dms., t.c.l. lb. .16½ - -
300-lb. fib. dms, t.c.l. lb. .14½ - -
300-lb. fib dms., c.l. lb. .14 - -
Zinc oxide pigment, American process, lead-free bgs., c.l., f.o.b. works lb. .12½ - -
bgs., l.c.l., 10 tons or more, same basis lb. .13 - -
bgs., l.c.l., smaller lots, same basis lb. .13½ - -
Zinc oxide, leaded, 35%, bgs., c.l., mills, f.o.b. works lb. .14 - -
bgs., l.c.l., 10 tons or more, same basis lb. .14½ - -
pigment, American process, leaded, 50%, bgs., l.c.l., 10 tons or more, same basis. lb. .14½ - -
Zinc oxide, pigment, French process, green seal, bgs., c.l., f.o.b. works lb. .14½ - -
bgs., l.c.l., 10 tons or more, same basis lb. .15 - -


VITAMIN A ROCHE
LIQUID PRODUCTS

Laboratory Data Sheet **VITAMIN A ROCHE**
Liquid Vitamin A Palmitate and Acetate

**Roche has all popular types for your manufacturing needs**

Summarized here for your convenience are facts about the many types of Roche vitamin A and vitamin A & D combinations which meet practically all pharmaceutical needs. Samples and technical literature are yours on request — without charge, of course. Ask your Roche salesman or write.

**A Note about Stability of Roche Vitamin A.** Roche production facilities and experience insure that all the forms of our vitamin A and A-D combinations have excellent stability characteristics. In the case of *crystalline vitamin A acetate* (Type A2.9) the special handling instructions of the label should be followed to protect the crystals *from oxidation due to exposure to air.*

**Liquid Vitamin A Products** (See other page for Dry Vitamin A Products)

| Type & Name | Usage | Potency (in U.S.P. units per gram) | Other Ingredients |
|---|---|---|---|
| AQUAPALM TM Vitamin A Palmitate, Isomerized | Aqueous multivitamin preparations and multivitamin soft gelatin capsules | 1,500,000 to 1,600,000 | Butylated hydroxyanisole and butylated hydroxytoluene as antioxidants |
| Type P1.8/BH Vitamin A Palmitate All Trans | As above, where maximum vitamin A concentration is desired | 1,650,000 to 1,800,000 | Butylated hydroxyanisole and butylated hydroxytoluene as antioxidants |
| Type P1MO/BH Vitamin A Palmitate All Trans | In aqueous dispersions, capsulated products, cosmetics and oleaginous preparations | 1,000,000 | Edible oil plus butylated hydroxyanisole and butylated hydroxytoluene as antioxidants |
| Type P1MO Vitamin A Palmitate All Trans | In aqueous dispersions, capsulated products, cosmetics and oleaginous preparations | 1,000,000 | Edible oil only, for standardization |
| **Vitamin A Palmitate and $D_2$ Blends** | | | |
| Vitamin A and $D_2$ Blend 10/1 | In aqueous dispersions, capsulated products, cosmetics | 1,000,000 Vitamin A 100,000 Vitamin $D_2$ | Edible oil only, for standardization |
| Vitamin A and $D_2$ Blend 5/1 | As above | 1,000,000 Vitamin A 200,000 Vitamin $D_2$ | Edible oil only, for standardization |
| **Vitamin A Special Types** | | | |
| A1MO Vitamin A Acetate (liquid) All Trans | In oil solutions and gelatin capsules | 1,000,000 | Edible oil only, for standardization |
| Type A2.9 Vitamin A Acetate (crystalline) All Trans | Research and special production | 2,800,000 to 2,900,000 | None |

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Fine Chemicals Division • **Hoffmann-La Roche Inc** • Nutley 10, N. J.

| | | | |
|---|---|---|---|
| **Zinc oxide, French process, green seal, bgs., l.c.l., smaller lots, same basis** | lb. | .14½- | — |
| **red seal, bgs., c.l. same basis** | lb. | .14½- | — |
| **Zinc oxide, French process, green seal, bgs., l.c.l., 10 tons or more, same basis** | lb. | .15 - | — |
| **bgs., l.c.l., smaller lots same basis** | lb. | .15 - | — |
| **Zinc oxide, white seal, bgs., c.l., same basis** | lb. | .14¾- | — |
| **bgs., l.c.l., 10 tons or more, same basis** | lb. | .15½- | — |
| **bgs., l.c.l., smaller lots, same basis** | lb. | .15¾- | — |
| **Zinc oxide, USP dms., c.l., frt. alld.** | lb. | .16 - | — |
| **dms., l.c.l., 10 tons or more, same basis** | lb. | .16½- | — |
| **dms., l.c.l., smaller lots, same basis** | lb. | .17 - | — |
| **Zinc phenolsulfonate, NF, gran., dms** | lb. | .45 | .46 |
| **NF, powd., dms.** | lb. | .48 | .49 |
| **Zinc resinate, precip. 7.2-7.6% Zn., dms., frt. alld** | lb. | .45 - | — |
| **Zinc silicofluoride, dms., works** | lb. | 12½ | .14 |
| **Zinc stearate USP, ctns., c.l.** | lb. | .41 - | — |
| | lb | 41 | — |
| **ctns., l.c.l.** | lb. | 43 | .46 |
| **Zinc sulfate, powd., monohydrate, 36% Zn, bgs., c.l., dlvd.E.** | 100 lbs. | 8.75 - | — |
| **bgs., l.c.l., dlvd. E** | 100 lbs. | 9.75 - | — |
| **Zinc sulfate in bbls 40c higher.** | | | |
| **Zinc sulfide, pure, bgs., c.l., dlvd** | lb. | .2530- | — |
| **Zinc undecylenate, 75-lb. fib., dms., f.o.b. works** | lb | 2.04 - | — |
| **Zinc, yellow (see Zinc chromate)** | | | |
| **Zinc-ammonium chloride, bgs., c.l., works** | 100 lbs. | 10.25 - | — |
| **bbls., c.l., works** | 200 lbs. | 10.85 - | — |
| **bbls., l.c.l., works** | 100 lbs. | 11.35 - | — |

| | | | |
|---|---|---|---|
| **Zinc-formaldehyde sulfoxylate, basic, 300-lb dms., frt. alld** | lb. | .28 - | — |
| **Normal, 250-lb. dms., frt. alld** | lb. | .55 - | — |
| **Zircon (G) gran. bgs., c.l. works.** | lb. | .03¼- | — |
| **Zircon (G) gran., bgs., 5 tons to c.l., works** | lb. | .03⅜- | — |
| **bgs., 1 ton to 9,999-lb. lots, works** | lb. | .04 | — |
| **bgs., smaller lots, works** | lb. | .06½- | — |
| **Zircon (G) milled, bgs. c.l. works.** | lb. | .04¼- | — |
| **bgs., 5 tons to c.l., works** | lb. | .04⅜- | — |
| **bgs., 1 ton to 9,999-lb. lots, works** | lb. | .04⅝- | — |
| **bgs., 500-1,999-lb. lots, works** | lb. | .07½- | — |
| **Zircon (G) in barrels 1c. higher.** | | | |
| **Zirconium acetate soln., 13% $ZrO_2$, dms. c.l. 30,000 lbs. min., works** | lb. | .23 - | — |
| **Zirconium hydride powd. electronic grade, dms., works** | lb. | 14.00 | 15.00 |
| **Zirconium oxide, CP, white, grd., bbls. or bgs., works** | lb. | 1.50 | — |
| **Electric-fused lump, bgs., 500 to 1,999-lb lots, works** | lb. | 48½- | — |
| **bgs., smaller lots, works** | lb. | .51 | — |
| **milled bgs. c.l., works** | lb. | .62 - | — |
| **bgs., 5-ton lots, works** | lb. | .62½- | — |
| **bgs., 1-ton to 9,999-lb. lots, works** | lb. | .63½- | — |
| **bgs., 500 to 1,999-lb lots, works** | lb. | .64 - | — |
| **bgs., smaller lots, works** | lb. | .66 - | — |
| **Glass polishing grade, 94-97% $ZrO_2$, bgs., works** | lb. | .55 | .65 |
| **Opacifier grade 85-90% $ZrO_2$, bgs.,** | lb. | .27 - | .50 |
| **Stabilized oxide 91% $ZrO_2$, milled, bgs** | lb. | .62 | .85 |
| **Zirconium oxychloride, cryst., ctns., 5-ton lots, works** | lb. | .37½- | — |

## OPD Reports From Europe

# *Plastics in Germany: They're Leading*

*—Continued from page 5*

continued its "astonishing" gains, the German industry reports, advancing a solid 33 percent in production last year.

Plastics based on condensation and addition were up 24 percent in production to around 400,000 tons. Particularly strong gains are reported for the modified resins for paints and phenolic resins, both of which had a production gain of about 33 percent over 1959. Almost as strong a gain was reported for some of the more modern plastics in this general group — the silicones, polyesters and polyurethanes.

**Cellulose Derivatives Gain 11 Percent**

The oldest plastic group, cellulose derivatives, show a 1960 growth curve of only 11 percent to 108,000 tons. In this group, production of celluloid held its own during the year, while cellophane showed a good increase.

With a good domestic market, German plastic exports didn't quite keep pace with the overall growth, rising about 20 percent, to $200 million. This export record obviously assured the industry a comfortable surplus balance with imports of only $67.5 million.

The details of the pattern of exports, though, gives another indication of why the German chemical industry is keeping the pressure on officials in Bonn to ease the Common Market's trade relations with the European Free Trade Association.

About 35 percent of the total plastics exports went to the seven EFTA nations against 28 percent to Common Market neighbors. The best customers in order were Holland in the Common Market, Great Britain in the EFTA, Italy in the Common Market and Switzerland and Austria, both in the EFTA.

**Polymers a Big Thing**

In almost all export markets, plastics based on polymerization were the strongest sellers. And the industry association notes that about 60 percent of the total exports was in polymers.

Plastics suppliers to Germany are led by the US industry, followed by Italy, Great Britain and France. Now that the Saar has become a part of Germany, its shipments of plastics to the rest of West Germany have about doubled. As in exports, imports are dominated by plastic polymers.

Like plastics producers in the US and other chemically advanced countries, the German companies are taking a long, serious look at the construction industry as a market for their products.

Chemische Werke Huels, one of the leading producers, has built a small plastic "test house" as a part of the promotional push. One German expert calculates world production of plastics last year at more than 6 million tons and predicts that successful applications in construction will push that total well over 20 million tons in the next three decades.

## *Warner-Lambert Won't Sell*

*—Continued from page 3*

pany was turning its back to other possible ventures, especially in light of its recent dickerings with Minnesota Mining & Manufacturing Company (OPD, 12/19/60). Although merger talks with 3M petered out, Mr. Driscoll indicated that his company is still looking.

"We are," said he, "actively seeking acquisitions primarily related to the pharmaceutical and international segments of our business. Under the right conditions, we would consider merging with another company, but only if Warner-Lambert does not lose its identity, and becomes the senior partner."

## *Chemical Firms' Tankcars*

*—Continued from page 3*

exceed the car rental expenditure of the lessee.

The proposal to pay additional allowances on short-haul shipments of the three chemicals was advanced in the light of these facts:

In 1958, the railroads in official territory moved only 348,607 tons of alcohol as compared with 541,417 tons in 1949, even though total production in the country increased from 767,000 to 855,670 tons annually in this period.

The movement of sulfuric acid also declined from 1,013,954 tons in 1949 to 535,069 tons in 1958, although total production in that period increased from 4,434,958 to 5,537,735 tons.

## Bids Wanted

**Alcohol,** pure, 700 to 1,000 tons, bids invited until April 24 by the Union of Wine Producing Cooperatives of Samos, S.A.R.L., Samos. Bidding document in French and is available on loan from the Trade Development Division, Bureau of Foreign Commerce, US Department of Commerce, Washington 25, D. C.

**Coatings, Enamel,** boot-topping, Spec. MIL-P-15123A, 1,980 gals., delivery to San Diego, Calif. Bid IFB 63077-3130-61B, April 21. **Paint,** antifouling, Spec. MIL-P-15931A, with GSSO/Spec. exception 8010-317, 6,200 gals., delivery to NSC Pearl Harbor. Bid IFB 63077-3089-61B, April 24. **Lacquer,** Spec. MIL-P-19538A (WEP), 2,163 gals. Bid IFB 63077-3104-61B, April 21. **Enamel,** various mil. specs., 18,200 gals. Bid IFB 63077-3131-61B, April 24. **Lacquer,** Spec. Fed. TT-L-58, Amend 1, Type II, 6,200 gals. Bid IFB 63077-3102-61B, April 21. **Enamel,** various mil. specs., 12,700 gals. Bid IFB 63077-3073-61B, April 24. Availability of specs. and spec. exception: Specs. available at Naval Supply Depot, Attn.: Code CDI, Bldg. 26, 5801 Tabor Rd., Philadelphia 11, Pa. Military Industrial Supply Agency, 700 Robbins Ave., Philadelphia 11, Pa.

**Drugs, Erithromycin,** oral suspension, USP, 105,120 bots., tablets, USP, 0.25 gm., 100s, 45,216 bots. Bid RFQ 9304Q, April 19. **Meclizine Hydrochloride,** tablets, 25 mg., 100s, 26,208 bots. Bid RFQ 9303, April 19. **Methocarbamol,** tablets, 0.5 gm., 500s, 8,880 bots. Bid RFQ 9442Q, April 19. **Meprobamate,** tablets, 0.4 gm., 500s, 19,344 bots. Bid RFQ 9489Q, April 19. Military Medical Supply Agency, 3rd Ave. and 29th St., Brooklyn 32, N. Y.


**VITAMIN A ROCHE**
DRY PRODUCTS

Laboratory Data Sheet **VITAMIN A ROCHE**
Dry Vitamin A Palmitate and Acetate Beadlets

**Dry Vitamin A Products** (See other page for Liquid Vitamin A Products)

| | Type & Name | Usage | Potency (in U.S.P. units per gram) | Other Ingredients | Mesh Size |
|---|---|---|---|---|---|
| | PALMABEADS TM 500 Dry Vitamin A Palmitate Beadlets type 500 | For dry preparations: tablets, capsules, etc., where special or unusual stress conditions exist (i.e. high moisture exposure) | 500,000 | Gelatin, carbohydrate, butylated hydroxyanisole, butylated hydroxytoluene, and sodium bisulfite as antioxidants | ROCHE SPECIAL MESH RANGE TO ASSURE MAXIMUM UNIFORMITY IN DRY PREPARATIONS |
| | PALMABEADS TM 500A/50D Dry Vitamin A Palmitate with Vitamin $D_2$ Beadlets | | 500,000-A 50,000-$D_2$ | | |
| COLD WATER DISPERSIBLE | Dry Vitamin A Palmitate Beadlets type 250-CWS | Water dispersible. For dry products to be reconstituted before use. This form is not recommended for tabletting | 250,000 | Vegetable gum, sugar, starch, butylated hydroxyanisole and butylated hydroxytoluene as antioxidants | |
| | Dry Vitamin $D_2$ Beadlets type 500-CWS | | 500,000 | As above plus corn oil | |
| | Dry Vitamin A Palmitate and $D_2$ Beadlets type 250-A/50D-CWS | | 250,000-A 50,000-$D_2$ | As above | |

**Dry Vitamin A Acetate Beadlets**

| | | | | |
|---|---|---|---|---|
| Dry Vitamin A Acetate Beadlets type 500 | For dry preparations: tablets, capsules, vitamin-fortified powdered supplements | 500,000 | Gelatin, sugar, and starch | 40 and 60 |
| Dry Vitamin A Acetate and Vitamin $D_2$ Beadlets type 500A/50D | | 500,000-A 50,000-$D_2$ | As above | 40 and 60 |
| Dry Vitamin A Acetate and Vitamin $D_2$ Beadlets type 500A/100D | | 500,000-A 100,000-$D_2$ | As above | 40 and 60 |
| Dry Vitamin A Acetate Beadlets type 325 | For tablets, capsules, vitamin-fortified powdered supplements | 325,000 | As above | 40 and 60 |
| Dry Vitamin A Acetate and Vitamin $D_2$ Beadlets type 325A/32.5D | | 325,000-A 32,500-$D_2$ | As above | 40 and 60 |
| Dry Vitamin $D_2$ Beadlets type 850 | | 850,000-$D_2$ | Gelatin, sugar, corn oil, starch, and butylated hydroxyanisole, butylated hydroxytoluene as antioxidants | 40 and 60 |

Fine Chemicals Division • **Hoffmann-La Roche Inc** • Nutley 10, N. J.
NOrth 7-5000 • New York City: OXford 5-1400
In Canada: Hoffmann-La Roche Limited, Vitamin Place, 1956 Bourdon Street, St. Laurent, Montreal 9, P.Q.
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## Whither Communism

The British Foreign Office has been publicly reported to feel that the reply of Russia to Britain's demand—or was it only a request?—for full information on the Soviet position and intention with respect to Laos answered most of the questions therein. That was on first reading of the reply.

President Kennedy—this country had gone along with Britain—was still insistent that Russia should help to get a cease-fire in Laos before any attention should be given to its proposals of revived and expanded peace parleys.

It could be that the British office will change its views when it has read "between the lines" of all that was said in the Russian reply and devotes due thought to the sidestepping therein of the cease-fire proposal.

Anyone who open-mindedly undertakes to read what the Russians said is quite likely to conclude that Moscow is, as usual, in favor of gabbing for time until it can figure out and prepare for what it can do to push the Red cause in troubled Laos with an eye to disruption, conversion and conquest.

But, what can be done about it? Little other than hold that fourteen-nation parley—and get nowhere—and revive the three-nation control commission set up by the Geneva conference—without power even to attempt to stop the warring in Laos. It should be clear to anyone impartially interested in the situation that Russia wants to "absorb" Laos by conquest.

Communist China may beat Russia to that end if it can suitably manipulate its opposition to SEATO plans in that direction. Because its Chinese "partner(?)" has been making noises about what it will do to Laos, it could be that Russia might deem it profitable to go along with some more of what the Free West has proposed.

All of which contributes with timely pertinence to the interest of the fact that the topic of the sixty-fifth annual meeting of the American Academy of Political & Social Science, to be held in the Benjamin Franklin hotel, Philadelphia, April 14 and 15, will be "Is International Communism Winning?"

The scheduled discussion of that topic will be offered from the following angles: propaganda and economic aid; cohesiveness and internal strength; Western military strength and security; and the United Nations. Among several scheduled subjects on which papers will subsequently be published by the academy are "Western Diplomacy in 1945" and "A Bold New Approach by the United States."

## Science in Commerce

What are the "existing programs of the department in the fields of science and technology" on which the Secretary of Commerce bases his proposal that he be provided with an assistant in charge of science and technology—as reported on page 3 last week? What have the responsibilities of that department got to do with the "interests of national defense and public welfare"—to quote the secretary? There are special departments covering those two fields; there is also a Federal Council for Science & Technology.

It is assumed here that the secretary was talking about physical science and technology. But, those practices have to do with production, not distribution, which is the operation field of commerce.

The Commerce official's arguments in connection with science and technology are deserving of official attention—in the direction of the establishment of a Department of Science & Technology—the aforementioned council does not measure up nominally to the importance of its operative field in national importance.

The science and technology which could be more than a little beneficially contributive to the national service of the Department of Commerce are in the social category—and they could be more specifically and nominally enlisted and applied to distinct advantage in many respects.

In that department, they should, of course, be in categories different from those of the science and technology required in the Department of Health, Education & Welfare.

In order that it may have more regard for and be able properly to evaluate the contributions of physical science and technology to the providing of new articles of commerce, the Department of Commerce should be fully enabled to enlist the assistance of the council for those practices and the other agencies in the national group encompassing such activities. Its needs in that direction should not often, if at all, be such that somebody in it could not understand what those other agencies were trying to pass on to it as helpful, necessary information.

## For Clean Water

There is good news for all who are in any manner concerned—including the chemical and other industries—in what was reported on page 4 last week with reference to the attitude of the Department of Health, Education & Welfare with respect to control of water pollution.

What may—and much can—happen to that news by the time the HEW proposals on objectives and procedures and other points as expressed in a revision of pending federal legislation, get through the congressional committee pow-wow set for today (April 10)—if the HEW material is fully available by that time—does not lend itself even to good guessing.

It is sincerely to be hoped and urged that all who participate in the congressional pollution pow-wow—whether they represent any branch or agency of government at any level, industry, or the general public—will have acquired the acquaintance with the various aspects of the numerous problems that confront any endeavor to deal preventively or remedially with water pollution and its consequences to the full extent that it is potentially and actually detrimental to the public welfare and the national interest.

They can acquire such acquaintance by way of studious reading of the proceedings of the National Conference on Water Pollution held in Washington December 12 to 14 last year. The 607-page report of those proceedings is obtainable from the Government Printing Office at $2.25 a copy.

Every business organization which has the regard that it should have for the public welfare and the desirable interests of its community should see to it that a copy of that report is in every school and public library or reading room in the community—including its own.

## OPD Bookshelf

### ABC's of Food Additives

There is no blinking the fact that in food additives the chemical industry has a man-sized public relations job on its hands.

It is no mean task to convince a public left limp with fear by the sensation mongers that additives are necessary and that, when used properly, they pose no hazard to the food supply.

Certainly, the industry has a good case to make. Today's food supply is plentiful, nutritious, safe and wholesome, convenient, varied and good tasting and economical — and food technologists unquestionably can take a good deal of the credit for this happy state of affairs.

It has been argued that truth will not suffice for such an emotion-charged subject as food safety and that the only effective answer to the doom-howlers is to match sensation with sensation.

Manufacturing Chemists' Association, soberly assessing the situation, has wisely decided to let the facts speak for themselves. As the first step in a long-range educational program on additives, MCA has put together a sixty-three-page basic reference book on food additives*.

The book is aimed, not at the general public, but at the "professionals to whom consumers turn for accurate information about food."

The MCA publication gives a low-pitched account of what food additives are and how they are used, describes some of the legislation designed to prevent their misuse and, in an eight-page appendix, lists some of the commonly used additives.

MCA's additives facts book is certainly a commendable effort and a step in the right direction. Anticipating, perhaps, some quibbling about the very elementary approach employed in the reference publication, the association says it worked on the premise that even food authorities are "rusty" on the subject of additives.

To all of which, an observer can only wonder: If the pros are so unknowing, how staggering must be the job ahead?

*FOOD ADDITIVES: What They Are How They Are Used. Manufacturing Chemists' Association, 1825 Connecticut Avenue, NW, Washington 9, D. C.

## Washington Talks It Over

### Cosmetic and Toiletry Manufacturers Who Have Oversized Packages Filled With Fluff and Air Had Better Take a Tip as the Government Starts Spanking the Food Packers.

By Ralph L. Cherry
Washington Editor

Cosmetic and toilet goods manufacturers—targets at times of charges of engaging in deceptive packaging practices—are being given a breather by Food & Drug Administration from any contemplated crackdown on such abuses. First to be disciplined by FDA will be the food packers. After that—maybe the cosmetic people.

FDA is toting a new and powerful weapon these days for use against manufacturers deceiving the public with excessive fluff and slack-filled containers. Officials are hinting that it is going to be brought into full play in industries governed by the food and drug act.

The starting point, however, is to be where the abuses are most felt by consumers—in the food field—and any move against producers in the cosmetic industry is of a low order of priority.

Producers in the latter industry, however, will be expected to gain knowledge from what goes on in the way of enforcement activity in the food field, of what FDA officials have in mind when they speak of "deceptively oversized cartons or boxes."

The thing that is enabling FDA to give increased attention to this phase of food and drug law enforcement is a recent decision by the Third Circuit Court of Appeals, which officials consider to be something of a landmark for future enforcement activity.

They describe it as "the first important decision" supporting the government in the problem of deceptive packaging, and indicate a belief that it will finally enable them to get a real enforcement program off the ground.

The decision of the Third Circuit involved an action brought by the agency under the food section of the law, but the unanimous opinion of the three-judge tribunal involved concepts of the law broad enough to cover all industries subject to the act.

The court upheld these important claims of the FDA under the misbranding sections of the law:

- That the consumer has a right to expect a non-transparent container to be reasonably full.
- That the size of the container is a reliable index to the content of the package.
- That the package not be filled with excessive padding.

FDA tried three times before to get a favorable decision on misbranding because of deceptive packaging, between 1945 and 1948, but failed. Because of budgetary reasons no new cases were instituted until 1959 and they resulted in the present favorable ruling.

# Antimony's Current Short Supply Viewed Only a Temporary Situation

Antimony ore is in short supply, but this may be just a temporary situation stemming from political conditions in Africa and bad weather in Bolivia. This view, running contrary to reports of an acute and continuing supply shortage, was expressed by an informed trade source last week. It was pointed out that the increased demand for antimony oxide by producers of flame-retardant plastics and paints has been a gradual trend over the past few years, causing no sudden pressure on supplies. Similarly, the automobile industry, which uses the metal for antimonial lead in batteries, has been increasing its requirements in a fairly predictable way. This is also held to be true of automotive requirements in Germany and Japan.

Another view makes Red China responsible for the present situation. A sudden withdrawal by China from the market is said to have forced its customers, Japan and India, to shop in western markets for ore, reducing the supplies available for western Europe.

For a contrasting view, one dealer here, who has been watching the market for many years, thinks it's in for a long bullish spell because of vigorous demand for oxide.

He points to increased use of flame-retardant polyvinyl chloride in home furnishings and to a legislative trend: Many states and communities are requiring that all plastics used in public buildings be flame-resistant.

**Antimony Imports Are Up**

Imports of antimony in all forms by the US last year totaled 13,874 tons, up from 12,681 tons the year before. Oxide imports increased about 15 percent to 1,965 tons from 1,706 tons.

Ore imports were about steady, totaling 6,455 tons as against 6,466 tons, while metal imports rose sharply to 5,437 tons from 4,395 tons.

It's felt by some observers that the growth of antimony oxide in flame-retardant plastics could be jeopardized by a higher price. Plastics men are said to be faced with both cost-price squeeze and the competition of low-priced imports.

Antimony metal appears to be in a stronger economic position. The leading US smelter last week raised prices 3½ cents a pound following a comparable hike in the London market.

Although overall, a large tonnage of antimony moves into automotive batteries, the metal represents only a small part of the total cost of a battery. Most antimonial lead formulations call for 7 percent antimony and the remainder lead.

### Price Trends

**Advanced**

Ammonium bicarbonate, ½c. per lb.
Antimony metal, dom., 3½c. per lb.
Cadmium, 10c. per lb.
Sodium nitrite, 40c. per 100 lbs.
Sulfur dichloride, dms., c.l., ¼c. per lb.
dms., l.c.l., ½c. per lb.
Sulfur dioxide, cylinders, small lots, 1c. per lb.
Sulfur monochloride, dms., c.l., ½c. per lb.
lb.
dms., l.c.l., ½c. per lb.
Tin metal (Straits), ⅜c. per lb.

**Reduced**

None

**Comparative Price Indexes**

(100—1949 average)

| Last week | Prev. week | Last month | April 8, 1960 |
|---|---|---|---|
| 106.86 | 106.84 | 106.84 | 104.84 |

*For Current Prices see page 9*

## Acids

**Chromic**—Market continues to hold its own as defense industry purchases cushion it against the downturn in automobile industry demand.

**Hydrofluoric**—Production of fluorinated hydrocarbons is running at a fair pace, pulling HF demand along. Government accounts are also active.

**Sulfuric**—Steel output continues its painstakingly slow but steady rise. During the week ended April 1 it totaled 1,632,000 tons, according to American Iron & Steel Institute, up from 1,611,000 the previous week.

For the year to date, output stands at 19,958,000 tons, down from 34,650,000 in the comparable period of last year.

## Bases and Salts

**Aluminum Sulfate**—Following the trend of paper production, alum sales remain off 5 to 10 percent from the pace prevailing at this time last year. Paper industry spokesmen, however, expect their business to be at the forefront of the economic upturn predicted for the second half.

**Borax**—Exports continue as one of the brightest areas of the market thanks to the continuing prosperity of western Europe. In this country, glass fiber and porcelain remain bogged down with the general economy pending an upturn in housing starts and construction work.

**Caustic Soda**—Though not up to snuff, business in caustic is said to be running a little better than the overall economy. Prices are steady at long standing levels.

**Chlorine**—The Spring upturn in paper production has been a little late this year. But chemical accounts are active.

**Copper Sulfate**—Production of copper sulfate totaled 4,700 tons in January, up 20 percent from December, the Bureau of Mines reports. Shipments rose 35 percent, totaling 4,364 tons, or 400 tons less than production, causing stocks to rise 5 percent to 5,768 tons at the end of January. Exports totaled 1,322 tons; imports were negligible.

**Sodium Sulfate**—At this stage, it looks as though byproduct supplies from the rayon industry will prove sufficient to take care of seasonal needs of detergent producers. However, the season is young yet, and if a shortage should develop by midsummer, there will be plenty of natural sulfate to make up the deficit, although it will command a premium price here in the east because of freight charges.

**Sulfur**—The following figures compiled by the Bureau of Mines, show production and shipments of sulfur during specified periods.

| | January | December |
|---|---|---|
| Native production | 400,433 | 477,089 |
| Shipments | 372,186 | 335,095 |
| Sales* | 371,280 | 361,844 |
| Stocks† | 3,697,709 | 3,668,556 |
| Recovered production | 66,343 | 64,265 |
| Shipments | 63,394 | 63,267 |
| Sales* | 65,449 | 65,294 |
| Stocks† | 110,361 | 109,467 |

* Calculated from production and change in stocks during the period.
† Producers stocks at mines or plants in transit, and in warehouse at end of period.

The following figures, compiled by the Bureau of Mines, show imports of Canadian and Mexican sulfur into the United States during specified period in long tons.

| | January | December |
|---|---|---|
| Ore | 6,837 | 4,845 |
| In any form | 63,471 | 48,776 |
| Total | 70,308 | 53,621 |
| **Dollar Value** | | |
| Ore | $ 149,237 | $ 108,907 |
| In any form | 1,484,920 | 1,003,293 |
| Total | $1,634,157 | $1,112,200 |

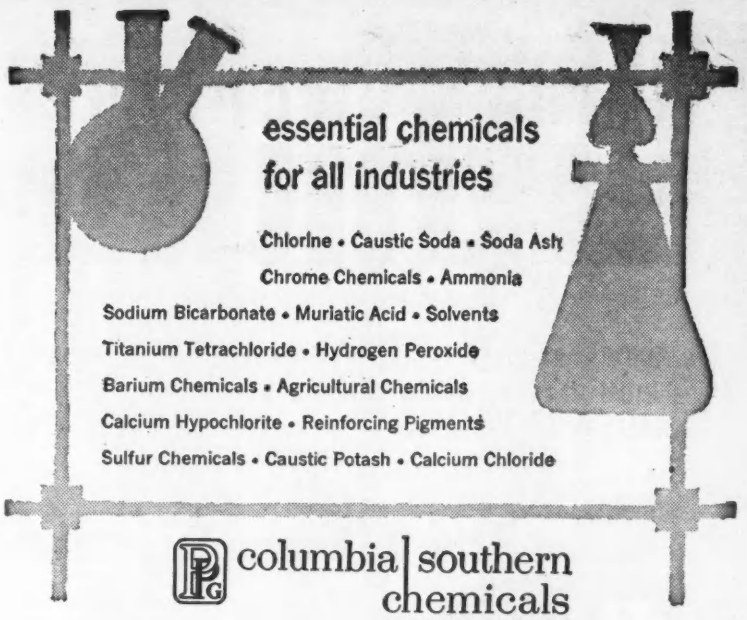
## Nonferrous Metals

**Aluminum**—Production and shipments of aluminum alloys by the nonintegrated secondary smelters in November showed declines from the previous month, the Bureau of Mines reports. Production of finished ingot dropped 8 percent and shipments declined 4 percent. Receipts of aluminum-base scrap were 2,000 tons, down 6 percent from October.

Independent secondary smelters used 23,876 tons, or 80 percent of a total aluminum-base scrap consumption of 29,695, Mines reports. Primary producers used 3,810 tons, or 13 percent; and foundries,

### *Paper Production Lower*

The American Paper & Pulp Association reported paper production for the week ended April 1, at 90.2 percent of theoretical capacity, as compared with the revised figure of 91.1 percent for the prevoius week and 97.9 percent for the corresponding week of last year.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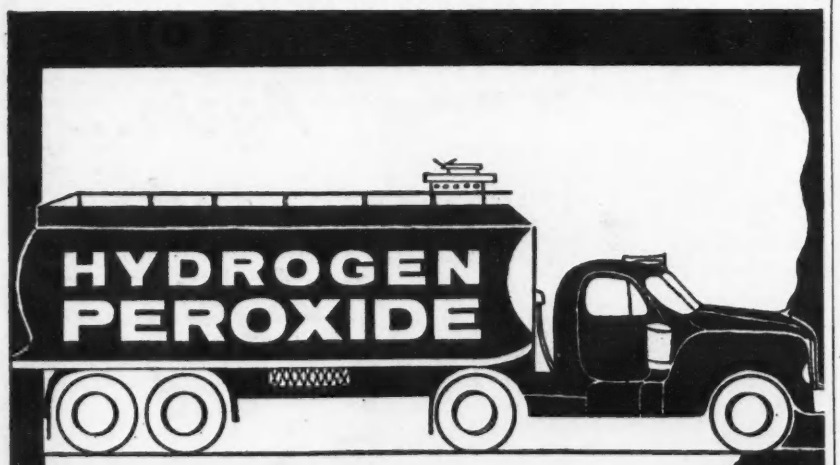


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## Heavy Chemicals

fabricators and others took 2,009 tons, or 7 percent.

Calculated metallic recovery totaled 24,170 tons: 19,475 from new scrap and 4,695 from old.

The Bureau estimates that full coverage of the industry would show a total scrap consumption of 35,000 tons and secondary ingot production of 23,000 tons. Calculated metallic recovery based on full coverage would total 29,000 tons, Mines estimates.

**Cadmium**—Prices have been advanced 10c. to $1.60 a pound for ton lots and $1.70 for less than ton lots, reflecting tight supply and strong export demand.

**Silver**—Bullion has been unchanged for over a year and a half at 91⅜c. a troy ounce, notwithstanding intermittent reports of a firmer market.

**Tin**—Market continued its bullish run, Straits metal closing at $1.05, spot, Friday.

### Heavy Chemical Briefs

**METAL STRIPPER:** An alkaline, cyanide-free stripper for removing nickel from steel, copper, brass and other copper alloys is now available from Enthone, Inc., a subsidiary of American Smelting & Refining Company. The material, "Enstrip," is a two-part liquid concentrate. It is said to be non-fuming and free of cyanides, acids and caustic soda.

**METAVANADATE UPGRADED:** Ammonium metavanadate available from Union Carbide Nuclear Corporation has been upgraded to a new high purity specification of 99.9 percent. The Union Carbide Corporation division says that special attention is being given to minimization of contaminants. The new product is a pale yellow, crystalline powder.

**SALES AGENT NAMED:** Fallek Products Company, New York, has been named exclusive sales agent for the Tennant Chemical Division of Tennant Development Corporation, whose plant is located at Newton, N.J. Products available: organic iodides, photographic chemicals, and the fine chemicals previously supplied by Chemo Puro Manufacturing Company.

**TOUGH ALLOY STEEL:** A new 18 percent nickel alloy steel said to have "unmatched toughness at the highest strength levels of conventional alloys" is the latest from International Nickel Company. The material, developed at Inco's Bayonne, N.J., research laboratory, appears headed for "applications involving exceptionally high pressure and stress."

### *Water Pollution Abatement*

*—Continued from page 7*

grants of 30 percent of the total estimated cost, or $250,000, whichever is less.

Each dollar of federal funds has been matched by $4.80 in local funds. More than half of the projects have been completed, one-fourth are under construction, and the remainder are awaiting construction.

Federally approved projects will serve a total population of 24 million and will abate pollution from municipal wastes in 31,000 miles of streams.

Construction of pollution abatement projects has increased most sharply among communities of less than 50,000 population, which have received nearly 90 percent of the federal aid.


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## Pharmaceutical Export Curbs Lifted for Hong Kong, Macao

Restrictions on exports of a number of medicinals to Hong Kong and Macao were lifted last week by the Department of Commerce.

The products involved cover a wide range of antibiotics, steroids and medicinal chemicals in bulk, and medicinal preparations in dosage form. Details of the items involved were in "Current Export Bulletin" No. 847.

## Perfumers Slate Symposium

The American Society of Perfumers will hold its seventh annual symposium Thursday (April 13), at the Essex House in New York. Theme of the meeting is "Experimental Findings on Odor and Olfaction." Moderating the symposium will be Christian Wight, of International Flavors & Fragrances, Inc.

## *Borane Fuel Plant Set*

*—Continued from page 3*

cork on the high-energy fuel program two years ago (OPD 8/17/59).

However, the Model City plant was retained with the understanding that its boron trichloride unit operate at one-seventh of its capacity to furnish an undisclosed amount of material to a pilot fuel making 600 pounds a day of borane fuel for the Air Force.

In the interim, contracts for fuel research and development have expired, and GSA will offer the plant for sale. The $38 million plant at Muskogee, Okla., operated by Callery Chemical Company, reportedly is unchanged in status. It is on stand-by.

## *Ammonia Plant in Texas*

*—Continued from page 3*

one of its two ammonia producing facilities at Memphis, Tenn.

In addition to Big Spring, Tex., and Memphis, Tenn., Grace holds a 49 percent interest in an ammonia plant in Puerto Rico and another in Trinidad, BWI. Caribe Nitrogen Corporation manages the Puerto Rican plant while Federation Chemical, Ltd., manages the one in Trinidad, BWI.

Grace's has completed five ammonia producing installations in the last seven years to make the company one of the largest US producers of ammonia. Three of the five installations have gone on stream since 1959.


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# *Chemical Laws From New Font: the States*

*—Continued from page 3*

and $2.50 for each registration thereafter. Some are a little higher and the tendency is for these figures to move up.

**Water Pollution a Big Problem**

The unusually large number of water pollution bills that have been proposed reflect the concern that is growing among the states over water supplies.

Most of the bills are more or less minor amendments to existing laws, but some, like the bill just passed by the New York legislature, is a broad new law with expanded authority.

There also has been much activity in the field of air pollution, with two new laws becoming effective this year in Indiana and West Virginia, plus the usual number of proposals that have been put forward in California where air pollution has become a real problem.

One matter that is causing a little concern in the area of food additives is whether the states will be encouraged to follow the federal law in this field or whether they may impose more restrictive requirements.

The reason for this concern is the fact that the Counsel of State Governments dropped the regulation it made a year ago demanding that state regulations in the food additives field follow federal requirements wherever possible.

The recommendation, which had been made last year, was dropped at the behest of state food and drug officials who felt state laws should be more flexible so as to meet local conditions.

So far, however, there has been no evidence that the states may go beyond the federal regulations. Both Tennessee and New York have enacted food additives laws in line with the federal statute.

**Recommendation Was Dropped**

The industry is also fighting a trend toward turning over regulation of pesticide sales to the state boards of health and conservation departments.

Chemical people have no objection to control of pesticides that are used for health purposes being under the jurisdiction of the boards of health. But they feel that on questions of an agricultural nature the matter should be left to the state agricultural departments, which are better acquainted with the problems involved.

To keep their members posted on state legislatures, national associations in the chemical field are giving more attention to state-level activities.

All are maintaining a close check on the progress of bills, being advised by weekly or daily airmail service (the National Agricultural Chemicals Association is being advised by teletype) by a commercial reporting service that records every change in the status of a bill in which the association is interested.

Because of its broader interests, the Manufacturing Chemists' Association handles the problem a little differently than do the other associations in the chemical field.

As information on the state bills funnels into MCA headquarters, it is relayed to the several committees—pollution bills to the pollution committee, hazardous labeling to its precautionary information group, etc.

The committees examine the bills and when necessary present the industry's viewpoints to the proper state committees or authorities. Sometimes an official of a company, concerned with the problems raised by a particular bill, will make the contact with the legislature.

In the other associations where the field of interest is considerably narrower, one of the staff members (as in the case of NACA) will follow progress of the bills closely and alert the companies with headquarters in the state to make contact with the bill sponsors or committees.

Often the staff member will also appear before the legislature in behalf of changes found to be needed to make the proposed law more workable.

## Rohm & Haas Marketing New Microbial Insecticide

Rohm & Haas Company, Philadelphia, is offering a new microbial insecticide for control of certain agricultural pests. The product, trade named "Bakthane" is said to be effective against cabbage looper, imported cabbage worm, tobacco hornworm, tobasco budworm and other hewing pests.

Active ingredient of the insecticide is Bacillus thuringiensis Berliner, in the form of viable spores. These spores, lethal when ingested by insects, are so harmless to other forms of life that "Bakthane" has been exempted from residue tolerance requirements on a number of truck and field crops, Rohm & Hass reports.

## *Sulfur Dioxide Plant*

*—Continued from page 3*

of notes and warrants to Prudential Insurance Company of America, the SEC report discloses.

The statement of Dixon Chemical & Research covers $2.9 million of 6 percent convertible sinking fund debentures due by 1978.

The money will be used as follows:

- $600,000 to be applied to construction of the sulfur dioxide plant.
- $700,000 for payment on account for the purchase last December of Better Finishes & Coatings, Inc., a producer of chromic acid.
- $500,000 for investment in 6 percent debentures.
- $70,000 for construction and fitting of a new plant office, machine shop and other facilities at Newark; and the balance for working capital.


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## Obituaries

**Robert T. Haslam**

Robert T. Haslam, director emeritus of W. R. Grace & Co. and a former vice-president of Standard Oil Company (New Jersey), died April 4 in Sarasota, Fla., after a long illness. He was seventy-three years old.

Dr. Haslam, who was also a consultant with Grace, began his industrial career in 1927 with Standard Oil and its affiliates. Earlier he had been professor of chemical engineering at Massachusetts Institute of Technology.

After retiring from Standard Oil in 1950, Dr. Haslam joined Grace as a consultant and worked with the company's president to organize entry into the chemical field.

Dr. Haslam held more than 200 chemical and petroleum patents.

**Roscoe H. Channing,** retired president of Hudson Bay Mining & Smelting Company, Ltd., of Canada, died April 1 in Tucson, Ariz. He was ninety-three years old.

**Dr. Arthur Preston Locke,** retired industrial chemist, died April 2 in Bradenton, Fla. He was sixty-three years old. Dr. Locke was chief research chemist for Zonite Products Corporation from 1934 to 1945 and its director of research from 1945 until his retirement in 1954. Zonite is now Chemway Corporation in Wayne, N. J.

**E. Hope Norton,** former industrialist in Ecuador, died March 4 in Dixie, Va. He was eighty-seven years old. Mr. Norton's many commodity interests included exports of Paraguayan quebracho extract.

**Moshe A. Novomeysky,** who tapped the mineral riches of the dead sea after many years of research, died March 31 in Paris. He was eighty-eight years old.

## Chemurgy Meeting to Study Outlook for Next Ten Years

"Chemurgy's Next Ten Years" has been selected as the theme for the twenty-sixth annual Chemurgic Conference, to be held this week, April 12 through 14 at the Sheraton-Gibson hotel in Cincinnati, Ohio.

Kicking off the meeting will be a speech on "The Expanding Opportunity for Industry in Chemurgic Research," by Irving T. Gumb, former president of the Council of State Chambers of Commerce.

Other speeches will include "Economics of Chemurgy," by Dr. Odin Wilhelmy, jr., of Battelle Memorial Institute, and "The Soybean Program Within the US," by Robert G. Houghtlin, president of the Nation Soybean Processors Association.

## *Polyethylene Developments*

*—Continued from page 5*

Mo., has developed a polyethylene film said to have a 40 percent greater impact strength than general purpose resin.

Olin's new film has a polymer coating, which adds resistance to migration of oils, greases, gases, and flavors to polyethylene's present qualities. Chief applications: wrapping of nuts, candy and dried fruits.

Monsanto expects increased applications for its tougher film in agriculture, building and packaging as vapor barriers, tarpaulins, temporary enclosures, shipping sacks, in liners for cartons, drums, boxes and barrels.

## *GE Will Enlarge*

*—Continued from page 4*

which cannot be made efficiently on present equipment.

The chemical materials department recently opened new production facilities for "Lexan" polycarbonate resins at Mt. Vernon, Ind. Pilot plant and laboratory facilities for "Lexan" resins are at department headquarters at Pittsfield, as are production of "Methylon" resins and magnesium oxide.

General Electric has been producing phenolic compounds at Pittsfield for more than thirty-five years.

## *Potash—Boom!!*

*—Continued from page 3*

ther information for the design of a large commercial installation."

Armour's interest in the venture doubtless stems from the potash needs of its fertilizer-producing division, Armour Agricultural Chemical Company. Pittsburgh Plate is a miner of many minerals.

Of the approximately 2.5 million tons of potash consumed each year in North America, agriculture uses about 91 percent, with the balance moving into the chemical industry as a raw material.


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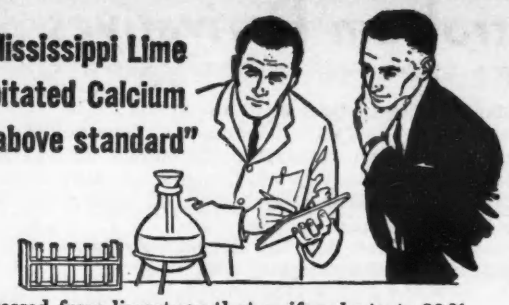

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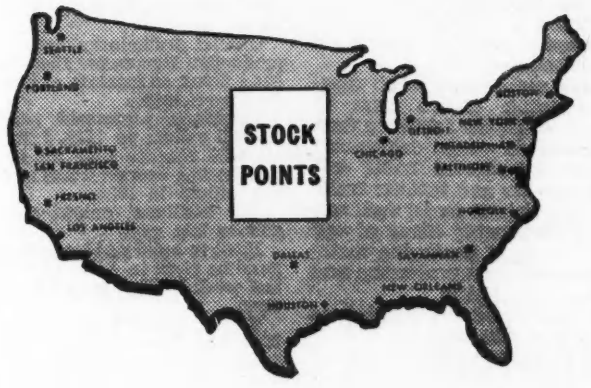


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# Petroleum Derivatives

Giant strides in production for aromatics is evident by the latest figures just released by the Tariff Commission. Benzene output shot up to 459 million gallons in 1960 after registering 330 million in 1959 and 290 million in 1958. Petroleum's share of last year's bonanza was 310 million gallons or 67.8 percent of the total, far above benzene from all sources in 1958 and within striking distance of 1959's total harvest. Coke-oven sources turned out 136 million gallons of benzene last year, only slightly more than the gain petroleum producers made in production from 1959 to 1960. Tar distillers accounted for 12.8 million gallons last year.

Toluene and xylene also made advances although not as great as in the case of benzene.

Toluene production in 1960 hit 304 million gallons, some 70 million gallons higher than the preceding year and 94 million higher than in 1958.

Xylene output last year zoomed to 326 million gallons, a rise of 82 million gallons from 1959 and 112 million gallons above 1958.

Following in the wake of the April 1 advance in mineral oils and petrolatums by a Chicago-based producer, two other major suppliers made announcements of price increases last week. Industry advances for all products is an average of 5 cents a gallon for mineral oils and ½ cent a pound for petrolatums. Prices may vary from locality to locality on the basis of freight and delivery terms.

Food & Drug Administration has accepted a petition to establish tolerances for white mineral oil under the Food Additives Amendment.

The petition seeks to establish regulations concerning certain uses of white mineral oil in the following food applications: Baked goods; dehydrated egg albumen; dehydrated fruits and vegetables; capsules and tablets; fruits and vegetables; animal feeds; food machinery and equipment; oiling of egg shells; constituent of packaging materials; defoamer for food processing, and sealant in food processing.

FDA has designated the petition as Food Additive Petition No. 302.

Crude oil production rose during the week ended March 25 but crude runs to stills declined according to reports received by API from the industry.

## Price Trends

**Advanced**

Mineral oils, white, NF, USP, 5c. per gal. Petrolatums, NF, USP, ½c. per lb.

**Reduced**

None

**Comparative Price Indexes**

(100=1949 average)

| Last week | Prev. week | Last month | April 8, 1960 |
|---|---|---|---|
| 104.10 | 103.74 | 103.74 | 103.82 |

*For Current Prices see page 9*

## Aromatic Solvents

**Benzene** — Although supply presently continues to be curtailed some sources are predicting a decided increase in availability before the quarter is out.

Several factors appear to be leading to greater availability.

For one, production is advancing in bounds. January output approached 40 million gallons. Indications are that succeeding months will show production steadily gaining as new plants come on stream.

Steel is showing signs of recuperating so that added supply from that area is soon due to come into the marketplace.

Coupled with increased availability is the downturn in certain areas of benzene application.

Styrene output in January was the lowest since the same month two years ago. Trade sources say February results will be no better when tabulated. Styrene demand should continue at equivalent low levels until Spring auto sales become sustained in heavy volume.

Weakness in phenol was also indicated as producers cut price recently. First quarter slump was due to pre-January 1 inventory building.

Trade sources are using these factors—burgeoning supply outstripping current demand levels—as evidence in building a case for increased availability within two months.

Production of benzene in January started out the new year with a bang as 39,900,898 gallons were turned out by all sources.

This amount represents almost a 2 million gallon increase from December.

Petroleum processors accounted for 30,813,906 gallons, up 1.1 million gallons from December.

Cokeoven operators turned out 8,251,702 gallons, down approximately 200,000 gallons from December.

Tar distillers produced 835,290 gallons after reporting no production in the preceding month.

Official preliminary Tariff Commission production figures for 1960 total 458,744,934 gallons, an increase of 135 million gallons from 1959.

Petroleum processors produced 309,752,949 gallons in 1960, just short of total 1959 benzene from all sources.

Cokeoven operators turned out 136,243,542 gallons in 1960.

Tar distillers' output was 12,778,443 gallons last year.

Plans to build a $15 million benzene and gasoline plant in Argentina were revealed last week by that country's state oil concern.

To be designed and constructed by a New York engineering company in conjunction with an Argentine firm, the plant is slated to produce 700 bbls. of benzene per day which will be employed in the manufacture of styrene and phenol.

**Toluene**—Material is reported moving in to benzene conversion in the Gulf area in good volume.

Competition in other areas from coke oven producers has cut into profits from sales in areas other than the Gulf.

Toluene production in January amounted to 23,675,999 gallons, down some 3.7 million gallons from December.

Petroleum processors turned out 21,696,717 gallons, down 3.5 million gallons from December.

Coke oven operators produced 1,979,282 gallons, down some 200,000 gallons from December.

Official preliminary Tariff Commission production total for toluene in 1960 is 304,342,256 gallons, an increase of approximately 70 million gallons from the previous year.

Petroleum processors turned out 250,426,539 gallons.

Coke oven operators produced 30,683,180 gallons.

Tar distillers accounted for 3,232,537 gallons.

**Xylene**—Market is reported firm by sources. Concentration on benzene output has cut into xylene supply to some degree.

In addition demand for orthoxylene continues strong in the face of phthalic and naphthalene shortages.

Auto resurgence in March augers well for solvent applications although other metal finishing industries do not seem to have as strong an immediate future.

Xylene production in January was 29,041,706 gallons, an increase of 700,000 gallons from December.

Petroleum processors and tar distillers turned out 28,502,452 gallons while coke oven operators produced 539,254 gallons.

Official preliminary Tariff Commission figures for 1960 reveal 326,028,340 gallons of xylene being produced, an increase of 82 million gallons from the previous year.

Petroleum processors and tar distillers accounted for 317,868,295 gallons and coke oven operators produced 8,160,045 gallons.

## Crude Oil Stocks Climb

Domestic and foreign crude petroleum stocks at the close of the week ended March 25 were 3,580,000 bbls. higher than at the end of the preceding week.

Week ended March 25—238,600,000 bbls.

Preceding week—235,020,000 bbls.

This increase comprises an increase of 3,415,000 bbls. in stocks of domestic crude and an increase of 165,000 bbls. of foreign crude.

(Source: Bureau of Mines)

# Trade Name Chemicals

## Styrenated Alkyds Holding Own In the Market for Industrial Paint

Styrenated alkyd resins for fast-drying enamels will continue to hold a place in industrial paint sales. Although the trend has been to the use of other modifying monomers such as acrylonitrile, vinyltoluene or methylmethacrylate, producers of styrenated alkyds feel the products have a definite place in industrial applications requiring a fast-drying enamel with light color and good color retention. On the market for more than a decade, styrenated alkyds have found extended use in producing the "hammer-tone" finish that shows up on office furniture, ovens and industrial equipment of all kinds.

Although the bulk of the market for styrenated alkyds is in industrial finishes, some specialty applications have been developed which capitalize on specific properties.

For example, can companies utilize the good color characteristics of this type of product in covering decorative printed designs with a clear topcoat of a styrenated alkyd. Some use is reported in clear finishes for wood kitchen cabinets.

**Styrene Resins Coatings Use**

While consumption of all styrene resins for protective coatings applications is expected to be about 70 million pounds this year, producers have had to run hard to stay in the same place.

Sales, which topped 71 million pounds in 1959, dropped to 64.8 million last year. But chemical men feel styrene resins will be able to hold a place in the coatings field due to cost advantage and the firm foothold they have in specific applications.

Included in the approximately 65 million pounds of styrene resins for coatings turned out last year is the styrene-alkyd polyester resins group. These products are 100 percent resin solids used with a catalyst in similar fashion to the epoxies.

In this category styrene is most often used as the cross-linking monomer for unsaturated polyesters. Prior to the curing stage, it acts as a solvent for the polyester.

A continued drop in price, coupled with good strength and compatibility, makes it likely that styrene will continue to be widely used in these products as a cross-linking agent for polyesters.

Most commercial products are marketed with a solids content of 50-60 percent in xylene or mineral spirits. Soybean oil is often used in varying concentrations and in some products makes up a substantial portion of solids content. Average price in the industry ranges from 20-25 cents a pound in bulk.

While styrene has been favored as a low-cost monomer for modified alkyds, it does have limitations. Solvent resistance and weatherability are relatively poor and stability and odor problems have been encountered, sources say.

**Oil-Modified Alkyds**

In addition, where oil modifiers are used, the cost of the oil becomes a factor. It's conceivable, observers point out, that an acrylic-modified alkyd using an inexpensive oil would compete with a styrene-modified product.

Schenectady Resins Division of Schenectady Varnish Company first began to market styrenated alkyds in the early fifties. The company currently offers "SSA-42" and "SSA-46."

Color range for both products, on the Gardiner scale, is 1-2 as compared to 2-4 for most alkyds. As a result of good initial color and good color retention properties, these products have found acceptance in metal lithography.

For example, in making a decorative metal container a base coat of white may be applied followed by application of printing ink. The container is then covered with a clear topcoat of quick-drying enamel such as "SSA-42" or "46."

"SSA-42" is approximately 60 percent solids in xylene. Acid number is 4-8; specific gravity, .980 to .995; weight, 8.2-8.4 pounds per gallon.

"SSA-46" is 50 percent solids in mineral spirits. Acid number is 4-8; specific gravity, .905 to .920; weight, 7.6 to 7.8 pounds per gallon. Soybean oil makes up 28 percent of total solids.

Other products offered by the company include a wide range of resins, varnishes and wire enamels for applications in adhesives and binders, brake linings, coatings, emulsion polishes, electrical insulating varnishes, encapsulating and potting, laminates, paper, reinforced plastics, rubber compounding and shell molding.

## STYRENE RESINS: COATINGS SALES

| | |
|---|---|
| 1961 ... | *70.0 million lbs. |
| 1960 ... | 64.8 million lbs. |
| 1959 ... | 71.0 million lbs. |
| 1958 ... | 103.7 million lbs. |
| 1957 ... | 84.7 million lbs. |
| 1956 ... | 93.4 million lbs. |
| 1955 ... | 93.7 million lbs. |
| 1954 ... | 80.4 million lbs. |

*Estimate

Source: Tariff Commission

**Figures include styrene-alkyd polyester resins for coatings use.**

American Alkyd Industries manufactures styrenated alkyds under the "Amapol" trade name at plants located in Carlstadt, N. J., and Richmond, Calif.

"Amapol 301" is a styrene-alkyd copolymer while "Amapol 401" is a vinyltoluene-alkyd copolymer. The products are sold in solution form with 50-60 percent solids and have been on the market for about eight years.

The company reports these are typical of the commercially available styrenated alkyds which find use as quick-drying enamels useful in coatings for office cabinets, ovens and industrial equipment.

**Cyanamid Has 'Cycopols'**

American Cyanamid Company has "Cycopol 102-5" on the market. The product is 60 percent solids in xylene and is priced at 25 cents pound in bulk. Cyanamid also manufactures a number of other products under the same tradename, among them "Cycopol 320-5," an acrylonitrile-based resin. Price on this one is 30 cents a pound.

Plastics Division of Allied Chemical Corporation offers two styrenated alkyds under the familiar "Plaskon" trade name. "Plaskon 3801" and "3802" are sold in solution form of 50 percent solids in xylene. The latter product has the lower viscosity. Prices range from 21¾ cents a pound in tankwagons to 24¾ cents a pound packed in drums.

Among other producers in the field are Sherwin-Williams Company with a product under the "Dyal" trade name. Reichhold Chemicals, Inc., manufactures "Styresol" styrenated alkyd resins for surface coatings, and Alkydol Laboratories, a division of Reichhold, has "Alkydol," also a styrenated alkyd. Jones-Dabney Company Division of Devoe & Reynolds Company markets "Styretex."

**SK's Vinyltoluene Treated Copolymers**

The "Ketrols" are vinyltoluene-vegetable oil copolymers produced by Spencer Kellogg & Sons for a variety of industrial finishes. The base copolymer in this series is essentially the same, but to meet different requirements different members of the series are thinned with xylene, mineral spirits or VM&P naphtha.

General characteristics of these products are similar to styrenated alkyds but are said to have a wider range of solvent compatibility which permits the use of low-cost, low-solvency thinners, and provides films of greater flexibility.

The company recommends a drier level

—Continued on page 41

# Agricultural Chemicals

Fertilizers marketed in the US for both farm and non-farm use dipped slightly in 1960, reports the US Department of Agriculture. For the fertilizer year ended June 1960, consumption of fertilizers dropped 1.1 percent or 290,000 tons to 25,022,000 tons. In 1959, shipments of fertilizers were pegged at 25,312,672 tons. Increases in shipments of fertilizers were reported in 18 states and the District of Columbia.

The eighteen states consumed 38 percent of the overall total accounting for 9,605,000 tons. California, Florida, and Georgia led the list with an increase of 526,000 tons in 1960. Decreases in shipments were reported in 31 states and Puerto Rico.

Mixed fertilizers comprised 63.5 percent of the total tonnage of all fertilizer products consumed and amounted to 15,880,000 tons, a decrease of 1.2 percent from the previous season.

The relative use of most of the mixed fertilizer grades remained about the same for both the 1959 and 1960 fertilizer seasons. Five of the grades, 5-10-10, 5-20-20, 12-12-12, and 10-10-10, accounted for about one-third of the total tonnage of mixtures consumed. One or more of the five grades were among the grades consumed in largest tonnages in most states.

Materials marketed for direct application amounted to 9,142,000 tons and comprised 36.5 percent of all fertilizer products used in the 1960 fertilizer year. Included in this tonnage were 7,767,000 tons of one or more of the primary plant nutrients and 1,375,000 tons of materials containing only secondary and trace nutrients pricipally calcium and sulfur, largely in the form of gypsum. USDA reports that consumption of primary nutrients was down 3.2 percent while secondary and trace nutrient consumption increased 12.4 percent.

Chemical nitrogen products comprised the only class of primary nutrient materials which increased in overall use. Leading in shipments were anhydrous ammonia, urea, and in particular, nitrogen solutions.

The continued upward trend toward greater use of higher analysis fertilizers was shown in the fact that while tonnages of mixed fertilizers were slightly lower, the content of primary nutrients was higher by 134,000 tons and accounted for one-half of the increase in nitrogen and all of the increase in available $P_2O_5$ and $K_2O$.

**Ammonium Sulfate**—The market situation for ammonium sulfate remains basically unchanged. Supplies continue to be reported as tight as the demand for fertilizer grade sulfate mounts as the peak use period approaches. Steel's operating capacity continues to lag with some reports indicating higher rates of production within in the next quarter.

**Animal Proteins**—The market for fishmeal and scrap continued to show improvement. Formula feed operators, due to the special situation existing in regard to soybean meal, have increased the percentage of fishmeal in their formula. This has added to the demand for fishmeal and has reduced stocks.

Just a few months ago, sources report, stocks of meal and scrap were at burdensome levels. Currently, spot stocks have decreased to a point where in some areas stocks of fishmeal are reported tight.

Sellers are reported offering fishmeal, bagged on both Atlantic and Gulf coasts, at $105 per ton. Buyers, however, are holding out for quotations $3 to $5 per ton lower. Forward delivery of fishmeal is holding in about the same pattern with buyers and sellers separated by a range of $3 to $5 per ton.

**Potash**—Higher levels of exports of potash from the US seem likely in 1961, reports the Business & Defense Services Administration. BDSA points out that because of the adverse international balance of payments situation, the International Cooperation Administration has been directed to restrict purchases of commodities abroad with its funds. This should result in more fertilizers being procured in the US for aid programs in Korea and other countries, the agency believes. Formerly, foreign suppliers have underbid US producers for much of the ICA fertilizer business.

World supplies of potash which became tight during the last half of 1960 may lag behind demand in 1961. Due to temporary shutdowns of some Spanish and French mines last year and the only recently solved problem encountered in shaft-sinking by Canadian potash interests in Saskatchewan.

The immediate outlook for world nitrogen is for increased capacity and sharper competition. World production and consumption of fertilizer nitrogen during the 1958-59 fertilizer year are estimated by the Food and Agriculture Organization of the United Nations at 8,750,000 and 8,000,000 metric tons N, respectively.

Although nitrogen sales in the Common Market area were up in 1959-60, European sources indicate that there was considerable price cutting and loss in earnings by producers, BDSA reports.

Relief from the surplus does not appear imminent, since capacity is expected to exceed consumption at about 80,000 metric tons annually. The administration reports that projected capacity through 1965 calls for about 880,000 metric tons while consumption has been placed at about 800,000 metric tons annually.

In the US, total 1960 production of nitrogen materials (synthetic and by-product for fertilizer and industry) of approximately 4,200,000 tons of N is estimated to have exceeded 90 percent of capacity. An industry operating so close to capacity would presumably be looking toward expansion, the administration reports. This expectation is confirmed by the announcement in recent months of seven new ammonia plants. These new projects will bring a total of about 500,000 tons of N, bringing overall nitrogen capacity to 5,000,000 tons or more by the end of 1962.

**Pyrethrum** — Production of pyrethrum in Ecuador totaled 142,061 kilos of pyrethrum flowers during the period January-June 1960, BDSA reports. Exports of dry flowers in the period reached 85,989 kilos and were valued at $57,779; 4,692 kilos of extract valued at $59,779 were exported. The agency reports that interest in the development of the pyrethrum industry in Ecuador is continuing.

### Price Trends

**Advanced**
None

**Reduced**
None

**Comparative Price Indexes**
(100=1949 average)

| Last week | Prev. week | Last month | April 8, 1960 |
|---|---|---|---|
| 111.65 | 111.00 | 111.00 | 110.95 |

*For Current Prices see page 9*

### Pesticides Output

Following are production statistics reported by the Tariff Commission representing the number of pounds of certain pesticides produced during 1960:

| | Preliminary Total 1960 |
|---|---|
| DDT | 163,582,000 |
| 2,4-D | 36,185,000 |
| Ester and salts | 34,031,000 |
| Acid equivalent | — |
| BHC | 37,444,000 |
| Gamma isomer | 6,932,000 |
| 2,4,5-T | 6,337,000 |

## Agricultural Chemical Briefs

**INSECTICIDE CLEARED:** Department of Agriculture has cleared "Sevin" for use on bean crops and for scale control on fruit trees, according to Union Carbide Corporation, New York. "Sevin" is described as a carbamate material which is reported to be effective in controlling a variety of pests.

**NEMATOCIDE SUGAR:** USDA reports that ordinary sugar is one of the most effective nematocides ever tested. After being mixed with nematode-infested soil, at rates of 1 to 5 percent by weight, sugar killed up to 100 percent of the nematodes within twenty-four hours.

Destruction was so complete, USDA found, that no microscopic trace of the nematodes could be detected. Research indicates that the sugar destroys the pest by causing their cell fluid to enter the soil; death results from dehydration.


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# Coal Chemicals

**A major producer last week cut the price of p-tert-butylphenol 2 cents a pound across the board. Effective on shipments after April 3 the price became 23½ cents a pound in tankcars, freight allowed, and 25½ cents a pound in bags, carlot amounts, same basis. Price activity at the second quarter mark tends to emphasize the intense competition taking place in the coal chemicals market.** Aside from long overdue increases for several dyestuff intermediates and a raise in cyclohexanol and in isophthalic acid prices, the significant price movement at the quarter was downward on the basis of competition and consumer pressure. First to fall was styrene monomer which was cut to the lowest level since it became commercially available. Blamed here was the general slowdown in rubber business due to failing car sales over the winter months. Latest production figures for January reveal styrene output at the lowest rate in two years. Next to drop was one producer's price of naphthalene. From an industry high of 7 cents, the material was cut to 6½ cents in order to remain competitive. Dodecylbenzene, an important detergent raw material, then took a ½ cent cut as large-scale consumers objected to the price equality of dodecylbenzene and tridecylbenzene. Then came phenol's turn. Natural and synthetic material was reduced ½ cent, again on the basis of consumer pressure. Following closely on the phenol cut was a 2 cent reduction in p-tert-butylphenol.

Production of steel for the week ended April 1 was 1,632,000 net tons, an increase of 1.3 percent from the preceding week.

Based on assumed 1961 steel capacity, rate of production for the week was 56.6 percent.

## Price Trends

**Advanced**

6-Chloro-2-nitrotoluene, 4½c. per lb.
Cyclohexanol, 2c. per lb.
F Salt, 20c. per lb.
Laurent's acid, 17c. per lb.
Neville and Winther's acid, 10c. per lb.
Picric acid, tech., 6c. per lb.
Sodium naphthionate, 5c. per lb.

**Reduced**

p-tert-Butylphenol, 2c. per lb.
Styrene monomer, tech., 1/100c. per lb.

**Comparative Price Indexes**

(100=1949 average)

| Last week | Prev. week | Last month | April 8, 1960 |
|---|---|---|---|
| 117.64 | 117.52 | 117.51 | 118.40 |

*For Current Prices see page 9*

## Basic Products

**Benzene**—Sources comment that benzene appears to be easing somewhat from the longstanding tight supply condition.

Material is still in short supply, observers remark, but the opinion is being expressed that this situation will not prevail past the second quarter.

In fact, some sources predict that loose supply conditions will exist in the second half of the year.

Part of the easing is due to new sources of supply which are now adding their volume to the market.

In addition, coke oven sources are beginning to show marginal improvement as steel rate continues a small but steady clumb.

Then, too, demand from at least one area of benzene consumption is in a slump resulting in added supply of raw material for other applications. Domestic styrene demand continues to diminish. January production was 122 million pounds, down 8.7 million pounds from February and the lowest monthly output in two years. Pickup is hoped for this month, however, on the basis of renewed auto production strength.

Total benzene supply from all sources in January soared to 39.9 million pounds, an increase of nearly 2 million pounds from December.

Cokeoven operators turned out 8,251,702 gallons in January, a drop of some 200,000 gallons from December.

Petroleum operators stepped up production to 30,813,906 gallons, an increase of 1.1 million gallons from December while tar distillers accounted for 835,290 gallons in January.

**Phenol**—Natural phenol has followed synthetic phenol in being reduced ½c. a pound.

Although pressure from consumers was responsible for the price cut, at least one producer reports that overall phenol business in March was rated excellent.

It's not likely that the cut will create any new business, sources say, but will serve only to sharpen the profit squeeze for phenol suppliers.

Preliminary Tariff Commission figures for natural and synthetic phenol production for 1960 totals 774 million pounds of which synthetic phenol accounted for 732 million pounds.

## Intermediates

**p-tert-Butylphenol**—A major producer last week made a two cent a pound across the board price reduction. Effective April 3 new price became 23½c. a pound, tankcars, freight allowed and 25½c. a pound, bags, carlots, same basis. L.c.l. prices are 26½c., same basis.

Coming hard on the heels of a phenol price cut due to consumer pressure, the reduction in p-tert-butylphenol is attributed by the producer to an attempt to encourage broader application, particularly in the field of resin manufacture for coatings and the formulation of surface active agents.

Current p-tert-butylphenol end uses include phenolic coatings resins for spar varnishes, floor varnishes, enamels and electrical insulating varnishes.

Other major applications include use as an intermediate in the production of anti-cracking agents for rubber formulations and as an anti-oxidant.

**2-Nitro Para Cresol**—Of interest to dyestuff manufacturers is the commercial availability of this intermediate.

A New York-based chemical producer reports guaranteed purity of minimum 98 percent.

Available at 71c. a pound in lots of 10 tons and up, and 73c. a pound in less than truckload amounts, the standard package is a non-returnable, coated 55-gallon open head steel drum. Prices include the cost of container as well as delivery anywhere East of the Rockies.

**Sodium Monochlor Phthalate**—Recently made commercially available by a New York-based producer, this intermediate is of interest to makers of crystallization-resistant phthalocyanine pigments.

The producer has maximized the amount of chlorine in the number four

## Aromatic Chemical Output: January

Figures for benzene, xylene and toluene include cokeoven operators, tar distillers and petroleum operators. Creosote oil statistics include distillate as such, and creosote content of solution, on 100%-creosote basis.

| | | 1961 *January* | 1960 *January* | *Preliminary* 1960 *Total* | 1959 *Total* |
|---|---|---|---|---|---|
| Aniline | lbs. | 10,229,217 | 10,428,536 | 120,434,775 | 129,643,613 |
| Benzene | gals. | 39,900,898 | 35,516,651 | 458,777,934 | 329,879,816 |
| Creosote, dead oil | gals. | 5,747,278 | 6,980,459 | 82,303,178 | 100,673,243 |
| Cresols, m-p and o-m-p fractions | lbs. | 3,611,122 | 4,466,411 | 49,562,619 | 39,054,756 |
| Cresylic acid, refined all sources | lbs. | 4,795,990 | 4,941,105 | 57,114,768 | 60,582,848 |
| Dodecylbenzene | lbs. | 34,773,657 | 36,967,091 | 465,385,340 | 473,968,854 |
| Monochlorobenzene | lbs. | 39,873,628 | 54,527,591 | 590,961,869 | 545,588,590 |
| Naphthalene, crude | lbs. | 28,742,276 | 47,167,417 | 501,899,467 | 408,035,458 |
| Phenol, tech and USP | lbs. | 77,078,033 | 65,416,457 | 774,002,669 | 691,909,117 |
| Phthalic anhydride | lbs. | 24,955,786 | 30,675,241 | 374,824,493 | 342,941,144 |
| Pyridine, refined 2° | lbs. | 2,335,478 | 102,732 | 2,335,478 | 1,978,111 |
| Styrene monomer | lbs. | 122,062,643 | 146,828,509 | 1,742,074,874 | 1,560,249,742 |
| Toluene | gals. | 23,675,599 | 22,113,348 | 304,342,256 | 243,055,768 |
| Xylene | gals. | 29,041,706 | 19,310,245 | 326,028,340 | 244,188,706 |

Source: Tariff Commission.

# Coal Chemicals

position so as to obtain maximum resistance to crystallization in the resulting pigment with attendant minimum greening of the red shade phthalocyanine blue pigment produced.

Product is priced at $1.50 a pound, as is basis, delivered East of the Rockies, in non-returnable 55-gallon fiber drums, drums included.

**Vinyl Toluene**—Report from the sole producer of this material indicates that first quarter sales were substantially the same as the first quarter last year.

Although holding its own in polyesters, the greatest area of growth for VT continues to be in alkyd and oil modification.

### Coal Chemicals

Estimated output of coal chemicals recovered from cokeoven operations during the week ended April 1, were as follows:

| | | |
|---|---|---|
| Ammonia liquor | lbs. | 483,792 |
| Ammonium sulfate | lbs. | 20,593,313 |
| Benzene | gals. | 2,2:8,143 |
| Coaltar | gals. | 11,191,124 |
| Crude chemical oil | gals. | 438,152 |
| Solvent naphtha | gals. | 73,025 |
| Toluene | gals. | 492,921 |
| Xylene | gals. | 136,522 |

### *Organics Unit*

—*Continued from page 5*

president for product development, (Mr. Smith was formerly general manager of the polymer division of Borden Chemical Company); Richard Hiendlmayr, financial officer; Edward Savage, jr., counsel, and S. J. Wommack, director of research and engineering.

Appointments in the chemicals division resulting from the move include:

M. C. Metziger, director of research; H. W. Voigt, financial officer, replacing C. V. Mayne, who has been appointed assistant comptroller in charge of accounting, in the corporate accounting department; B. E. Hill, planning coordinator, and N. O. Stein, executive assistant to the division vice-president for production and engineering.


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## DDT, Endrin Purchases Set by Turkey and Sudan

Two announcements were made last week of prospective purchases of substantial quantities of insecticides—one by Turkey and the other by the Sudan.

The Agro Merck, Kabatas, Ekeman Han, Kat 1, Istanbul, is seeking bids by April 28 for three lots of DDT 100 percent, technical powder, totaling 340,900 pounds. The purchase is to be made under ICA purchase authorization No. 277-237, 899-128-1006.

Bids are being invited by the Sudan Gezira Board, Barakat, Sudan, until April 22, for the following: 162,000 imperial gallons of DDT emulsion concentrate; 120,000 gallons of endrin; 6,000 gallons of 2-chloro-2-diethylcardamoyl-1-methyl vinyl dimethyl phosphate (rogor-phosphamidan); and 2,000 liters of metasyston (methyl demeton).

### *Fertilizer Consumption*

—*Continued from page 7*

states by 1,003,000 tons, about one-half of which was in Illinois, Missouri, North and South Carolina.

Mixed fertilizer comprised 63.5 percent of the total tonnage, amounting to 15,880,000 tons—a decrease of 189,000 tons, or 1.2 percent, from 16,089,027 tons consumed the previous year.

Some fifty grades totaling 50,000 tons or more were recorded in the ammonia column for a total of 12,223,000 tons, accounting for 77 percent of the total tonnage of mixtures. About 1,700 other grades made up the remaining 23 percent of the tonnage.

Materials marketed for direct application amounted to 9,142,000 tons, comprising 36.5 percent of the total.

Included in the figure were 7,767,000 tons of materials containing one or more of the three primary plant nutrients and 1,375,000 tons of materials containing only secondary and trace nutrients—principally calcium, and sulfur largely in the form of gypsum.

Chemical nitrogen products comprised the only class of primary nutrients which increased in overall use, totaling 4,525,000 tons, or 31,000 more than in the previous year.

Although most of products in this category declined, the higher use of anhydrous ammonia, urea and in particular, the nitrogen solutions, offset the decreases.

Natural organic materials declined 45,000 tons to 473,000; phosphate fertilizers were down 222,000 tons to 2,292,000; and potash materials were off 18,000 tons to 477,000.

The USDA preliminary report is based on shipments by manufacturers, sales by liquid nitrogen applicators, and on state tonnage reports.

### *Polybutadiene Rubber*

—*Continued from page 3*

lyst developed by Firestone. Isoprene and butadiene, petroleum derivatives, are the building blocks for "Coral" and "Diene" rubbers, respectively.

The plant is designed to permit the rapid conversion from production of one to the other of the new synthetics as the demand requires. "Diene" rubber is being produced initially because of the qualities which it can lend to natural rubber in blends.

Opening of the plant increases Firestone's annual capacity for the production of synthetic rubber to 281,500 long tons at plants in Orange; Akron, Ohio; Lake Charles, La., and Pottstown, Pa. This is in addition to the natural rubber produced on 90,000 acres of land at the company's plantations in Liberia.

A synthetic plant under construction at Port Jerome, France, and another planned at Bareilly, India, will further increase the company's synthetic capacity in the near future.

With the start of production at Orange, Firestone has more than doubled its synthetic capacity since purchasing the Akron and Lake Charles plants from the federal government in 1955.


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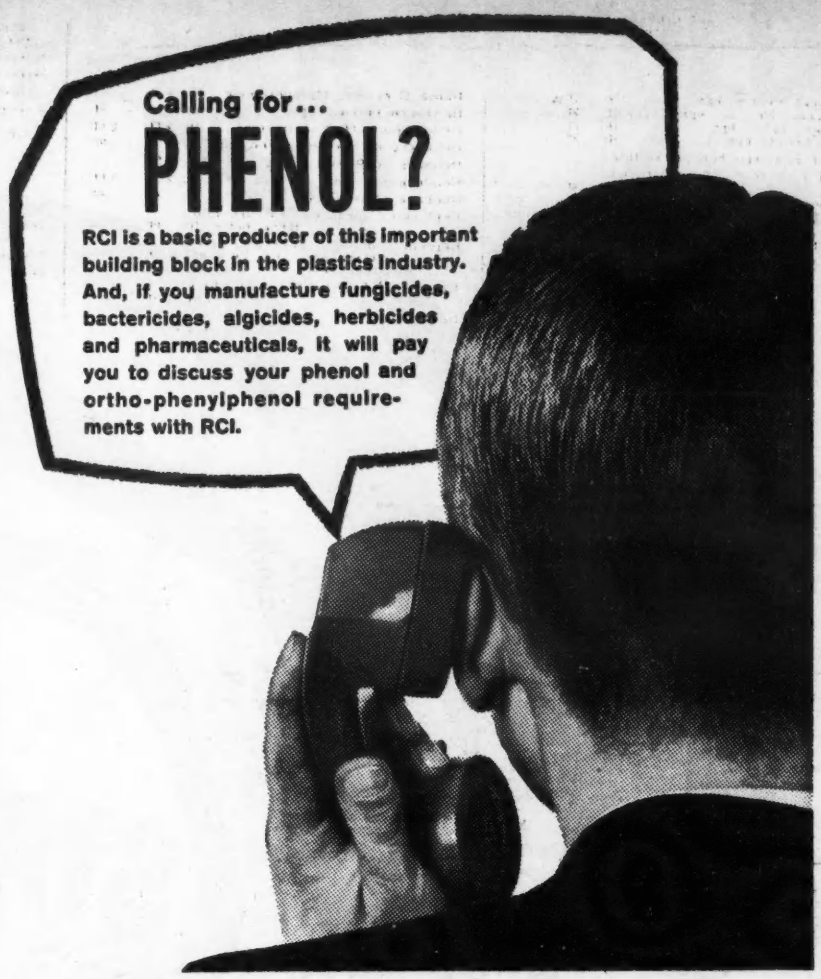
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# Drugs, Fine Chemicals

Dihydrostreptomycin production was an estimated 378,000 pounds in 1960, according to a preliminary report just issued by the Tariff Commission. This compares with 470,000 pounds in 1959 and 561,000 pounds in 1958, which figures indicate that demand for DHS was already trending downward prior to announcement of Food & Drug Administration's proposed relabeling requirements last October. FDA, acting on reports of chronic toxicity—particularly auditory impairment, a potential hazard in long-term DHS therapy — asked that the drug be labeled "for use only in patients who cannot tolerate streptomycin."

Prior to FDA's move, two manufacturers of the antibiotic halted production. Today, the three remaining producers are concentrating their selling efforts on veterinary and export markets, it's believed. Spokesman for one of these firms noted earlier that the trend to streptomycin as a natural replacement for DHS, was readily detectable early in 1960 although it was not "precipitous" until late spring.

Nonetheless, streptomycin production reached a record-high last year; the preliminary figure is 580,000 pounds, far exceeding 1959 output of 281,000 pounds and 1958's 179,000 pounds. Furthermore, an additional if smaller gain is likely in 1961.

Observers figure that the impact of FDA's relabeling requirement proposals—which the trade probably got wind of several weeks before the official announcement—will not be a major factor in markets for the antibiotics this year. They forecast a steady but more gradual gain in output and sales of strep and a relatively smaller drop for DHS, which has not lost its major market, veterinary medicinals.

**Ascorbic Acid**—Although prices took quite a beating last year, production of ascorbic acid increased substantially. Output of acid and salts, according to a preliminary report from the Tariff Commission, was 5,436,136 pounds in '60, up from 4,764,000 in '59.

The increase would have been greater, undoubtedly, if imports weren't the factor they are in this market. Inshipments last year, not yet tabulated by the Census bureau, were approximately 300,000 pounds, according to an unofficial estimate.

**Gelatin**—Census bureau, US Department of Commerce, reports there were 13 firms producing gelatin in 1960. Their geographic distribution by states: Illinois, 2; Massachusetts, 3; Michigan, 1; Minnesota, 1; New Jersey, 2; New York, 3; and Wisconsin, 1.

Other noteworthy items in Census' 1960 gelatin market summary were statistics (in some instances, revised) concerning production, shipments and inventories.

Production of gelatin in '60 amounted to 59,680,000 pounds, up from 56,492,000 in '59 and a 5-year high. Of the total, 52,245,000 pounds were manufactured from hides while the remainder (7,435,000) was ossein-derived.

Classified by type, output was (in thousands of pounds): edible 42,765; technical 2,736; pharmaceutical 3,899; and photographic, 10,280.

Shipments during all of '60 were 58,208,000 pounds, down slightly from '59 volume of 58,401,000. By type, shipments were (in thousands of pounds): edible 41,329; technical 2,547; pharmaceutical 3,736; photographic 10,596.

Stocks of gelatin at the end of 1960 totaled 12,707,000 pounds, higher than at any time during the year. The figure represented inventories of edible material, amounting to 5,450,000 pounds; technical, 1,000 pounds; pharmaceutical, 1,098; photographic, 3,760.

**Menthol**—Spot prices for Brazilian menthol have gone lower, reflecting, reportedly, the lack of strong domestic inquiry and expectations of a larger crop—meaning lower replacement costs for dealers in the material here.

Recent trading has been conducted at approximately $8 to $8.10 a pound, the large crystals, as usual, commanding the 10c. premium, according to market sources contacted by OPD. Unofficial reports find, however, that these prices can be shaded on large quantity orders.

**Quinine**—A Dutch firm has been awarded a contract to purchase 2,759,508 ounces of quinine, in dosage form, by General Services Administration. The bid for the stockpiled material, long ago declared excess to national defense needs, was $221,000.

The same Dutch firm was also high bidder for 446,000 ounces of quinine hydrochloride in powder form with a bid of $45,000. No contract has been awarded as yet, however, according to GSA.

**Threonine**—Trend in dl-threonine has been downward, which, in itself, is not unusual for this or any other material that falls within the general classification of drugs or dietary supplements.

Since 1956, however, the decline has been particularly sharp, more so, in fact, than demand growth and attendant production economies would seem to warrant. What has happened?

Trade sources, recently contacted by OPD, explained the series of reductions as competitive moves aimed at Japanese imports. These, reportedly, have increased steadily over the years to where they are today a major factor in the domestic market.

Spokesman for a major producer of dl-threonine and other amino acids noted additionally that his firm was forced out of the l-threonine market by large-volume, lower-cost Japanese product.

Current listing on dl-threonine is $115 a kilo in lots of 25 kilos.

### Price Trends

**Advanced**
None

**Reduced**
None

**Comparative Price Indexes**
(100=1949 average)

| Last week | Prev. week | Last month | April 8, 1960 |
|---|---|---|---|
| 59.29 | 59.29 | 59.28 | 60.32 |

*For Current Prices see page 9*

## Botanicals

Higher replacement costs have forced dealers here to boost prices for areca nuts, Irish moss and black psyllium seed. Generally, however, stability prevails in both domestic and imported botanical markets.

Imports detained by the Food & Drug Administration at the Port of New York during the two week period ended March 24 included 2 lots (10 bags) of gum karaya and 2 lots (633 bags) of orange peel.

**Areca Nuts**—Current quote on the powder is 18c. to 20c. a pound, up approxi-

### Drugs and Fine Chemicals Output: January

Following statistics for selected fine chemicals and drugs were compiled by the Tariff Commission. Figures relate to the production of bulk material only.

| | | *January* 1961 | *Total* 1960* |
|---|---|---|---|
| Acetylsalicylic acid | lbs. | 2,162,549 | 22,837,306 |
| Ascorbic acid and salts | lbs. | 437,166 | 5,436,136 |
| Dihydrostreptomycin | gms. | 21,364,423 | 171,682,977 |
| Niacin and amide | lbs. | 201,938 | 2,619,899 |
| Penicillin salts | million-units | 61,418,962 | 571,845,945 |
| Phenobarbital | lbs. | — | 272,847 |
| Pyridoxine | lbs. | 6,235 | 73,365 |
| Streptomycin | gms. | 22,816,574 | 263,190,598 |
| Sulfa drugs | lbs. | 401,679 | 5,133,841 |
| Tetracycline | gms. | 12,039,560 | 136,649,957 |
| Thiamin derivatives | lbs. | 25,431 | 327,804 |

A dash (—) indicates data not reported.
* Preliminary.


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# Drugs, Fine Chemicals

mately 5c. a pound from that previously quoted. Higher replacement costs account for the advance.

**Irish Moss**—A recent 5c. increase has set the listing at 30c. to 32c. a pound. Relatively scarce on spot, the botanical is expected to be in limited supply indefinitely because of the smallness of the new crop.

**Psyllium Seed**—Black seed has been advanced about 4c., to a range of 42c.-45c. a pound.

**Tragacanth Gum**—Production of tragacanth gum in Iran in 1960, as in 1959, was considerably below normal, and prices at source were very high. Dry weather and unfavorable growing conditions, according to Business & Defense Services Administration, contributed to a poorer quality gum.

Collection of tragacanth ribbon was estimated at from 100 to 150 metric tons, compared with 300 tons in normal years. The tragacanth flake harvest was estimated at 1,500 tons, compared with 4,000 tons in normal years.

## Drug, Fine Chemical Briefs

**DISTRIBUTOR NAMED:** Tennant Development Corporation, a subsidiary of C. Tennant, Sons & Co., has appointed Fallek Products Company exclusive distributor of its fine chemicals and other chemical products for the pharmaceutical, photographic, cosmetic, food and animal feed industries. Both firms are headquartered in New York.

**HEADACHE REMEDY:** Patients complaining of two or more common types of headache—allergic and sinus—are significantly relieved of pain by "Sinutab," clinical studies find. A product of Warner-Chilcott Laboratories, Morris Plains, N. J., "Sinutab" contains two pain relievers, one fast-acting and the other longer-acting; a drug to constrict dilated blood vessels, and an antihistamine with mild tranquilizing effect.

**RESPIRATORY STIMULANT:** "Emivan," a respiratory stimulant clinically tested for the last two years, is now available for general use by physicians from U. S. Vitamin & Pharmaceutical Corp., New York. Chemically 3-methoxyl-4-hydrobenzoic acid diethylamide, a vanillic acid derivative, "Emivan" may be employed to revive persons in coma from overdoses of barbiturates, narcotics and many depressant chemicals.

## *P. A.'s See Upturn*

*—Continued from page 4*

same since February. Although some firms reduced prices almost to the point of profit elimination in order to meet competition, there are now signs of certain adjustments in pricing policy.

**Purchased Materials Inventories**

Inventory reduction continues but at a slightly lower rate than last month. A healthy 54 percent report levels the same as last month and remarks from this group indicate that they have reached bottom and are in balance. A total of 16 percent report that they have added to inventories, up from 13 percent last month, and 30 percent report continued reduction. This is down from 36 percent in February. While the majority indicate that they are satisfied with present reduced levels, comments show they are keeping an eye on world conditions, delivery schedules, and price trends.

**Employment**

Perhaps the most encouraging note in the March reports centers on employment statistics. A total of 12 percent report improvement in employment, up 6 percent from February. While this in itself is worthy of some note, greater significance lies in the fact that this is the first upturn reported since July, 1960. A large 30 percent continue to report a worsened employment situation, but this is down from 42 percent in February.

**Buying Policy**

Purchasing executives seem inclined to at least place a "toe in the water" by moderate extension of forward commitments as evidenced by their March reports. While no impulsive movements are indicated, 16 percent are extended for ninety days or longer on production materials, up from 12 percent last month. Those committed for sixty days or less dropped from 88 percent to 84 percent. Even the MRO category shows some lengthening, with the 30-day-or-less group totaling 73 percent, a drop from 79 percent in February. Capital expenditures also exhibit a slightly strengthened picture, with 45 percent willing to commit for six months or more. This increase of 6 percent last month seems to have come primarily from the 90-day group.

The general lengthening of forward buying does not indicate a movement to stockpile, however, as members continue to show great resistance to inventory increases.

| | Percent Reporting | | | | |
|---|---|---|---|---|---|
| March | Hands to Mouth | 30 Days | 60 Days | 90 Days | 6 Mos. to 1 Yr. |
| Production Materials | 9 | 41 | 34 | 12 | 4 |
| MRO Supplies..... | 31 | 42 | 21 | 5 | 1 |
| Capital Expenditures | 17 | 7 | 10 | 21 | 45 |
| *February* | | | | | |
| Production Materials | 12 | 39 | 37 | 9 | 3 |
| MRO Supplies..... | 31 | 48 | 17 | 4 | 0 |
| Capital Expenditures | 17 | 8 | 11 | 25 | 39 |

**Specific Commodity Changes**

Many committee members report specific price changes this month, although only a few commodities were mentioned consistently. The present general picture seems to reflect stable to upward tendencies as previously noted.

On the up side are: Copper and steel scrap, rubber, and sodium nitrite.

On the down side are: Corrugated containers, styrene, and miscellaneous electrical equipment.

In short supply: Certain coaltar chemicals.


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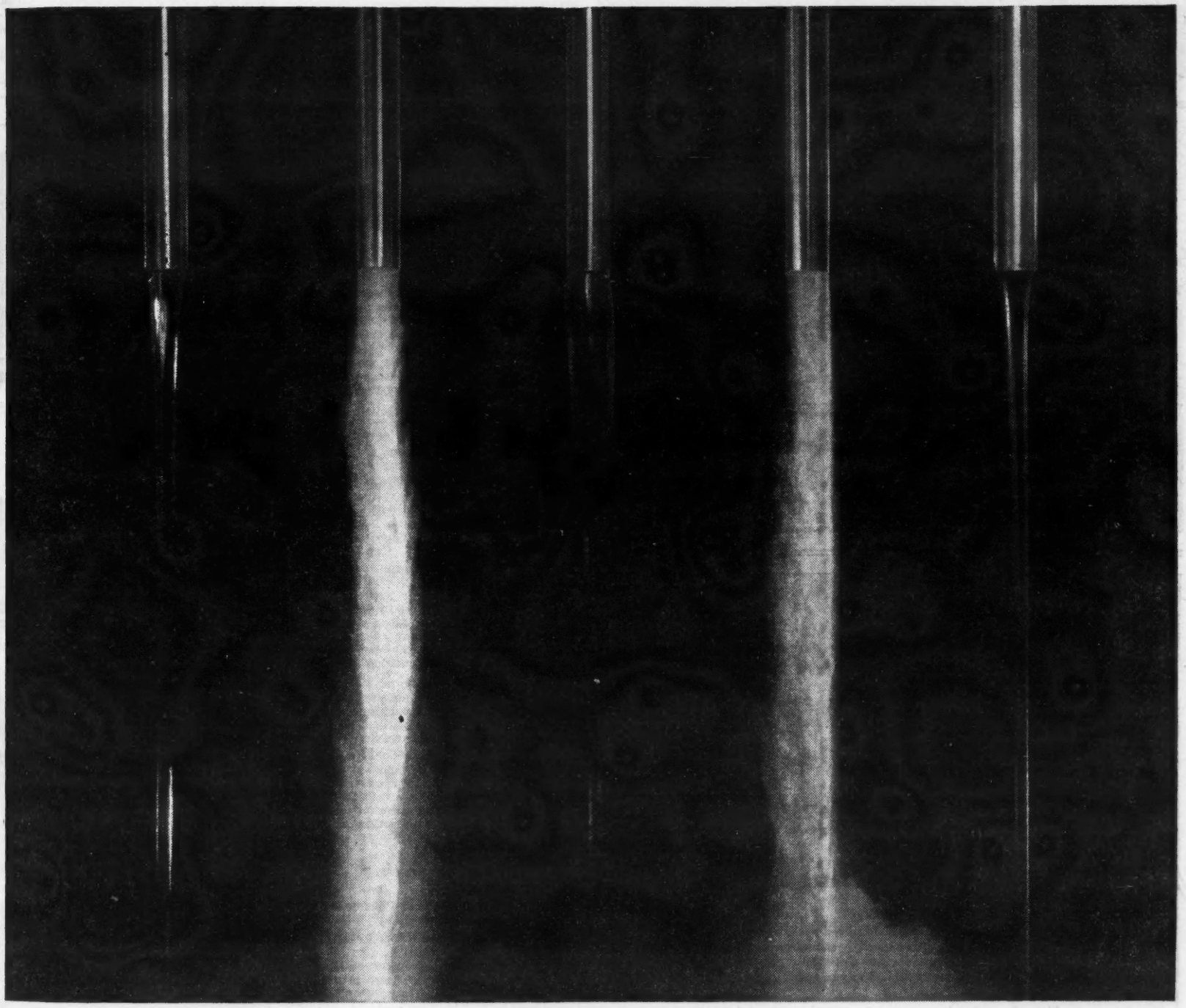

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# Trade Name Chemicals

—*Continued from page 40*

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## Trade Name Briefs

**ADHESIVES:** Arabol Manufacturing Company, maker of more than 600 adhesive products, is publishing an external house organ designed to keep customers and prospects informed about new developments in adhesives as well as supplying news about the company. The publication, called the "Arabol Adhesive Advisor," is being issued as a four-page quarterly.

**AEROSOLS:** E. I. duPont de Nemours & Co. reports aerosol container corrosion associated with reaction of ethyl alcohol and "Freon 11" can be prevented by use of a newly introduced propellent formulation containing a special stabilizer. The new product has been designated "Freon 11 S" and will carry the same price as "Freon 11."

Development of the new product grew out of duPont research indicating corrosion in nonaqeuous products containing ethyl alcohol and propellent 11 is due to reaction of these two components rather than hydrolysis of the small amount of water in the mixture.

**COATINGS:** Warwick Chemical Division has developed a new air-drying solvent solution designed to increase resistance of paper and paperboard products to water and weathering. Tradenamed "Impregnole 367," the new material is a mixture of General Electric silicone polymers and other filmforming ingredients.

**RESINS:** Monsanto Chemical Company has introduced an improved methylated methylol melamine resin ("Scriptite 31") designed to impart water resistance to coatings for offset printing paper manufactured on high-speed machinery.

Added to the binder system for pigment coating formulations, the resin links with the protein or latex base to form a tough, water-impervious coating, the company reports.

Monsanto has also come out with two new polyethylene resins ("MPE 70" and "MPE 72") designed for applying an inner layer of polyethylene to paper, board, film, foil and textiles. Edward R. Tolles, manager of polyethylene sales, estimates consumption of polyethylene for these purposes will be 125 million pounds by 1965.

**URETHANES:** Flexible urethane foam with pressure sensitive backing is now being offered by Air-O-Plastik Corporation, Union City, N. J., for a variety of cushioning, insulating and sealing applications.

Weather stripping is reported to be the biggest market now, but other growing uses include gasketing, case liners, dust seals for television sets, sound deadeners under car hoods and insulation in gas detection equipment.

## *Drug Counterfeiting*

—*Continued from page 5*

originated with General Pharmacal Company.

Here is what Commissioner Larrick has to say about the matter:

"Counterfeiting of new and potent drugs has been a recurrent problem of varying intensity for years. Our legal actions in this field date back to 1951. Because of the economic incentive and the lure of easy profits, the problem will recur.

"However, it has been and still is our view that the facts to date do not warrant disturbing sick people about the quality of the medications they have been taking. The survey results support this conclusion and indicate that the vast majority of our drugs are authentic. Still, the origin of counterfeits and the possibility that they have not been properly manufactured leaves us no room for apathy or complacency.

"Potentially, the problem is an explosive one and unless constant vigilance is maintained by law enforcing officials and tough enforcement pressure constantly applied, the problem could get out of hand to the detriment of public health and welfare. We have directed and are directing every available resource to the task of putting this racket out of business and to that end are planning a continuing, broad investigation.

"Marketing of counterfeit drugs is a bootleg operation easily detected by the retail pharmacist. I again urge, as I did last October, that retailers insist upon receiving drugs only in original, sealed manufacturer's packaging. The racket could not exist without the cooperation of unethical druggists."

## *Polyolefin Unit*

—*Continued from page 5*

hopeful for speedy advances in fiber development.

Dr. Gilman S. Hooper, Hercules' director of research and development for the fiber development division, recently stated that "relatively few systems (for dyeing polypropylene fiber) give colors that meet requirements for wash-fastness, light-fastness, freedom from crocking and resistance to dry cleaning."

Hercules hopes to overcome the dyeing bugaboo, however. Dr. Hooper states that "considerable progress has been and is being made" in polypropylene fiber dyeing. Furthermore, he says that the company has worked out a "fair range of light to medium colors" for polypropylene fiber.


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# Aliphatic Organics

Trade people in diverse areas of the organic chemicals market are forecasting a gradual uptrend in business during the second quarter. Their optimism, called healthy and needed by several of the amateur psychologists contacted by OPD last week, relates to the fact that several of the traditional barometers of business are once again up-bound. Cited, for example, is the rise in employment during March; the upturn in steel production; the relatively big increase in new car sales, and other indicators of a more particular nature.

Among the latter, of course, is the firmer market for plywood. This should encourage producers of formaldehyde resins—especially those on the west coast where plywood and particle board adhesives reportedly represent the major outlet.

Accelerated wholesale demand for plywood, due, perhaps, to the seasonal rise in construction work, has boosted both production and prices. A key grade, quarter-inch sanded fir plywood was posted at $72 a thousand feet last week by two major manufacturers. This was the third increase from the $60 level in effect a fortnight ago.

Price advances were put through April 1, as scheduled, for vinyl chloride monomer, ethyl silicate and a-D-methyl glucoside. Higher operating costs forced the changes, it's understood.

Selling lower currently, as a result of second quarter reductions, are furfuryl alcohol and tetrahydrofurfuryl alcohol. Carbon disulfide is also down, but the decline reflects a conversion of shipping terms from delivered to f.o.b. works.

**Ethyl Alcohol**—Entering February, producers of SD-alcohol (specially denatured) held stocks amounting to 7,647,789 wine gallons, up from 5,222,319 gallons thirty days earlier and 3,662,715 gallons a year earlier. The rise reflected an increase in production and a decrease in withdrawals.

January production of SD-alcohol was 27,491,106 wine gallons, compared with 25,747,272 in December and 22,413,052 in January 1960. Withdrawals totaled 25,150,033 gallons, as against 26,390,044 and 24,509,011.

Output of SD-alcohol from July 1, 1960 through January 1961 was 172,473,629 gallons while withdrawals ran to 169,014,015. In the comparable period a year earlier, production was 156,341,655 and withdrawals 159,760,953 gallons.

January production of completely denatured alcohol amounted to 155,191 wine gallons, up from 105,905 in December and 63,311 in January 1960. At the same time withdrawals rose to 166,835 gallons from 92,132 and 69,492. Net result was a decline in stocks, which totaled 17,400 gallons at the end of January, as against 29,394 thirty days earlier. The year before, however, stocks were only 6,027 gallons.

Cumulative output of completely denatured alcohol for the period July 1, 1960 through January 1961 was 551,034 gallons and withdrawals, 549,257. In the comparable seven-months the preceding alcohol year, production was 445,006 and withdrawals, 459,350.

Statistics are reported by the Internal Revenue Service, US Treasury Department.

**Formaldehyde**—Production of formaldehyde in 1960, according to a preliminary report issued last week by the Tariff Commission, was approximately 1.7 billion pounds. Compared with actual '59 output, the figure represents a decrease of about 50 million pounds, or just under three percent.

Chances are, however, that the '60 total will be revised upward in the final report, as happened the preceding year, thus sparing us the task of accounting for a drop in output, which, at worst, could reflect no more than a temporary readjustment necessitated by recession-slackened sales to plywood and other consuming industries.

Boding well for the immediate future is the upward trend in plywood prices made possible, reportedly, by accelerated wholesale demand. Quarter-inch sanded fir plywood, a key grade used in building, for example, was boosted by two manufacturers last week to $72 a thousand feet—an advance of $4.

This was the third increase from the $60 level in effect only a fortnight before. With the exception of the latest change, other price advances have gone industry-wide. It's logical, then, to expect the $72 price to be posted throughout the trade eventually.

In the long run, of course, much can be expected of polyformaldehyde resins, namely "Delrin" and "Celcon," two available currently.

"Delrin," the first developed, is now being used in more than 500 applications and new ones are coming along daily. Just reported is the availability of steel conveyor chains with "Delrin"-brushed rollers, which, the manufacturer says, "feature unsurpassed wear and corrosion resistance."

**Glycerine** — February production of crude and synthetic glycerine was 22.2 million pounds, down one-half million pounds from January and 2.8 million pounds from February a year ago.

Output of all grades of refined glycerine in February was 20.2 million pounds, down 15.5 percent from January, according to the preliminary report received from the Glycerine Producers' Association last week.

At February's end, stocks of crude and synthetic glycerine were 27.4 million pounds, up 6.2 percent from January, while stocks of refined glycerine, at 33.2 million pounds, were up only 1.2 percent. Combined inventories rose 3.4 percent to 60.6 million pounds.

**Methyl Glucoside**—Higher prices were posted for a-D-methyl glucoside, April 1. Under the new schedule, written on an f.o.b. works basis, the carload (40,000 pounds minimum) listing is 26c. a pound, the truckload (23,000 pounds minimum),

### Price Trends

**Advanced**

Ethyl silicate, 5c. per lb.
a-D-Methyl glucoside, 2c. per lb.
Vinyl chloride monomer, .05c. per lb.

**Reduced**

Furfural alcohol, dms., 1c. per lb.
Tetrahydrofurfuryl alcohol, 6c. per lb.

**Comparative Price Indexes**

(100=1949 average)

| Last week | Prev. week | Last month | April 8, 1960 |
|---|---|---|---|
| 130.54 | 130.53 | 130.54 | 132.54 |

*For Current Prices see page 9*

### Organic Chemicals Output: January

The following figures represent output of specified organic chemicals in January 1961 and December 1960, as reported by the Tariff Commission.

| Acetic Acid: | January | December |
|---|---|---|
| Synthetic | 58,178,404 | 60,038,771 |
| Natural (wood distillation) | — | 1,524,000 |
| Acetic anhydride | 74,378,486 | 80,059,523 |
| Acetone | 60,708,761 | 64,385,852 |
| Acrylonitrile | 18,651,862 | 14,763,249 |
| 1,3 Butadiene (rubber grade) | 149,771,808 | 136,013,615 |
| Carbon disulfide | 49,401,458 | 42,629,690 |
| Carbon tetrachloride | 31,949,067 | 27,304,113 |
| Ethanolamines (Mono-, di-, and tri) | 9,253,163 | 7,363,675 |
| Ethyl acetate (85 percent) | 5,984,722 | 5,775,231 |
| Ethylene glycol | 119,511,812 | 108,791,633 |
| Formaldehyde (37 percent by weight) | 127,115,756 | 129,894,000 |
| Methanol: | | |
| Synthetic | 184,479,122 | 182,215,772 |
| Natural (wood distillation) | — | 1,135,440 |
| Pentaerythritol | 5,520,862 | 5,051,662 |
| Perchloroethylene | 14,929,995 | 15,656,024 |
| Propylene glycol | 11,998,544 | — |
| Trichloroethylene | 24,312,659 | 26,523,475 |

A dash (—) indicates data not reported.


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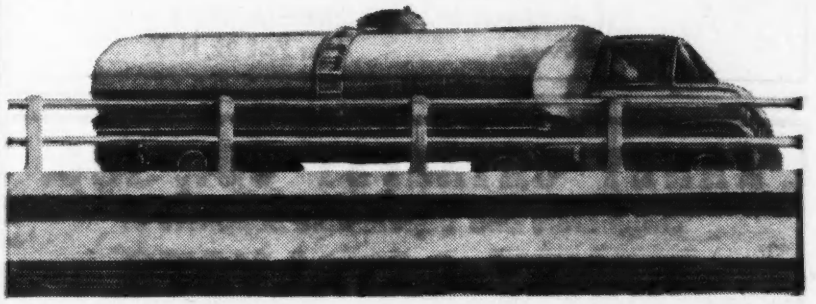

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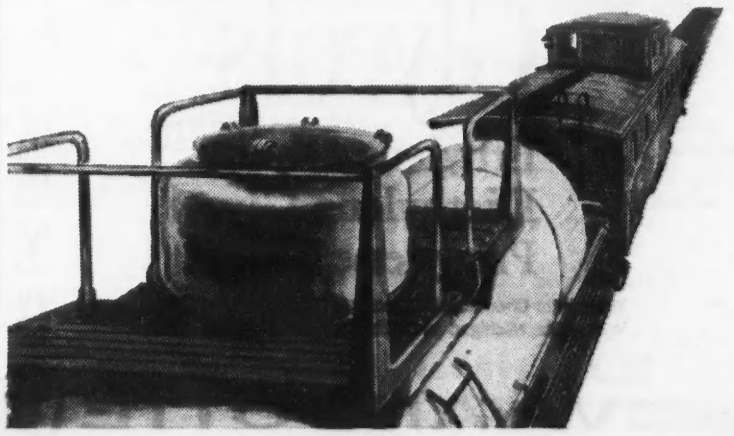

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## Aliphatic Organics

27c. a pound, and the less truckload, 28c. a pound. New prices represent a 2c. a pound across-the-board increase.

In an earlier move this year, the producer of the chemical advanced prices 3c. to 3½c. a pound. This and the current action were necessitated by increased manufacturing costs, it's understood.

A spokesman for the producer indicates that the market for the chemical has not expanded as rapidly as forecast, although prospects for continued steady growth are excellent.

Thinking is now that the existing schedule will hold for the balance of the year; more competitive pricing in 1962 is considered likely, however.

Methyl glucoside is used as an esterification agent. Two major competitors are pentaerythritol and sorbitol.

**Molasses**—Imports of industrial and feed molasses during January totaled 30.2 million gallons. This was approximately 13 million gallons greater than December 1960 imports and almost double the volume (16.5 million) of January a year ago.

Cuba was the principal source of the foreign supply, accounting for 9.6 million gallons—nearly one-third of total volume. Other major shippers were (in millions of gallons): Dominican Republic 5.8; France 6.6; Rumania 3.4; Mexico 2.2 and the Netherlands 2.2.

Markets for feeding cane molasses were steady during the week ended March 28. Demand slowed as many feed manufacturers and other feed molasses users anticipated the effect of spring weather on feed ingredient requirements.

Prices at New Orleans were unchanged to ½c. a gallon higher, but the mostly price remained at 13c. a gallon.

**Pelargonic Acid**—A domestic manufacturer of pelargonic acid quotes the following schedule: tankcars 25c. a pound: carloads of drums, 27½c. a pound; ton lots 28½c. a pound; and less than ton lots, 29½c. a pound. All prices are f.o.b. destination east of Mississippi river.


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# Coating Materials

Metals and their related salts were the subject on most of the price movement in the coatings market for the week. An antimony oxide price boost two weeks ago failed to become market-wide as at least two processors elected at least temporarily to hold with the old price. Basis for the higher price had been the recent increase on antimony ore on the London market, as well as the tightening supply situation.

Estimates of the availability of the ores do not agree. Some report no difficulty in obtaining ores, others claiming that shipments from Bolivia and Africa have been reduced, resulting in a tight supply situation. One source said last week that Red Chinese antimony which was moving to European markets is now being stockpiled behind the iron curtain. Thus adding to the shortage of the metal.

As of Friday, the oxide was quoted in a range of 26½ cents to 30 cents per pound, as some processors continue to enforce the price boost. With the market for the oxide split in regard to price only time will decide which price will hold.

A 10 cents per pound increase on cadmium metal that went into effect on April 1 will probably have no immediate effect on the cadmium pigments, sources report. Demand for the pigments is currently normal and it should take some time before present stocks are worked off. That would place the time for any decision on cadmium listings some time in May or June and sources say that the increase on the metal may not be in force at that time.

The last increase on the cadmium pigments occurred last November. At that time cadmium metal was increased about 10 cents per pound, and resulted in a similar increase on the pigments.

Casein market continued in its routine fashion for the week. Prices were reported to be unchanged on Argentine, with Polish quotation slightly higher. The feeling in the trade seems to indicate that the bottom has been hit in regard to casein prices. Demand from paper operations is reported to be picking up, but sources report that generally little business is being done.

## Prime Pigments

**Antimony Oxide**—The reaction to the announcement of two weeks ago boosting antimony oxide listings was met with mixed feelings in the trade. Reluctance to meet the increase was evident earlier in the week as several processors adopted a wait-and-see policy.

Contacted by OPD, some in the trade were not entirely convinced that a shortage in the supplies of the ores exists. The opposite view contends that ore supplies are tightening due to a reduction in shipments from Africa and Boliva, as a result of political factors in the former and weather conditions in the latter.

This they say, combined with large scale buying on the part of Japanese interests has reduced the flow of ore to the world markets. As an indication of the tight supply situation, these sources point to the trend toward higher firmer quotations on the London exchange which a few weeks ago boosted ore prices. The higher ore price necessitated the increase on the oxide, this argument runs.

On the other hand, some in the trade contend that a real shortage in the supplies of antimony ore may not exist. One official of a Mid-West based company reported that he had experienced no difficulty in obtaining ores needed for his operations. Other trade sources supported this view. It is on that basis that some companies remain on the fence in regard to the price increase. How long this fence-sitting will continue is another question.

The pressure to meet the advance may become irresistible, some observers believe.

In the meantime, OPD will quote a price spread of 26½c. to 30c. per pound for carlot quantities of antimony oxide. Word on the reluctant companies is expected some time this week.

**Cadmium Pigments**—A 10c. per pound price boost on cadmium metal that went into effect on April 1, threatened the listings for the cadmium pigments. Sources contacted by OPD reported that they were still studying the move, with announcements expected at a later date.

The last increase on the cadmium pigments occurred last November following a similar increase on the metal. The April 1 increase was reported to be the effect of the long decline in stocks, improved export demand as well as other factors on the domestic market.

### Price Trends

**Advanced**

Dicyclohexyl phthalate, 1½c. per lb.

**Reduced**

None

**Comparative Price Indexes**

(100=1949 average)

| Last week | Prev. week | Last month | April 8, 1930 |
|---|---|---|---|
| 104.57 | 104.55 | 104.55 | 103.03 |

*For Current Prices See Page 9*

**Carbon Black**—Latest listings for the carbon and bone blacks of one major producer indicate that listings will remain unchanged during the second quarter. Demand for the blacks is reported to be routine at this time. Supplies are ample.

**Titanium Dioxide**—The market for titanium dioxide is reported to have taken a turn for the better in the past month, sources report. Demand from the paper industry is at good levels, paint sources lagging, however.

## Synthetic Resins

The following preliminary figures show production and sales in pounds for January 1961, as reported by the Tariff Commission:

| January* | Production | Sales |
|---|---|---|
| Phenolic and other tar acid resins: | | |
| Molding resins | 15,736,315 | 13,351,519 |
| Laminating resins | 4,879,152 | 3,545,617 |
| Protective coating resins, modified, unmodified, except by rosin | 1,665,289 | 1,282,527 |
| Urea and melamine resins: | | |
| Protective coating resins, straight modified: | 2,580,735 | 1,891,721 |
| Styrene resins: | | |
| Protective coating resins, straight modified | 6,542,528 | 5,655,165 |
| Vinyl resins: | | |
| Total all types | 87,690,532 | 86,438,036 |
| Alkyd resins for protective coatings: | | |
| Phthalic anhydride types, unmodified | 16,149,911 | 6,491,947 |
| Modified with tar acids, rosin and/or other material except styrene | 5,949,166 | 3,279,425 |
| Polybasic acid types except phthalic: | | |
| Unmodified | 597,236 | 292,017 |
| Modified with tar acids, rosin and/or other material except styrene | 619,238 | 282,751 |
| Rosin modification for protective coatings: | | |
| Rosin, resin esters, unmodified (ester gums, esterified with glycerol) | 616,611 | 436,828 |
| Esterified with other alcohols, pentaerythritol, glycols, etc. | 636,443 | 592,323 |
| Modifications with phenolic and other tar acid resins | 2,023,085 | 1,592,233 |
| Modifications with maleic and fumaric acids | 2,226,422 | 1,515,953 |
| All other modifications | 3,805,272 | 3,372,743 |
| Coumarone-indene and petroleum polymer resins | 14,808,990 | 16,310,336 |
| Miscellaneous plastics and resin materials | 26,308,208 | 23,649,403 |

* Partly Estimated.

## Lacquer Materials

**Nitrocellulose**—The market for nitrocellulose is holding in the same general market pattern as in recent weeks. Supplies are reported to be ample with demand somewhat off from the peak last year. Listings are unchanged.

**Plasticizers**—With the exception of the one price increase that went into effect on April 1, the market for the phthalate esters continues to be routine. Supplies are reported to be improved with some decrease in demand noted. The April 1 price advance took place on dicyclohexyl phthalate. It went up 1½c. per pound to 49½c. per pound. The outlook for the remainder of quarter is in line with that for the general economy: gradual improvement reaching a peak some time in the third or fourth quarter.

## Miscellaneous

**Casein**—The market for imported casein continued in its listless pattern for the week. Listings remained basically unchanged. Argentine casein in the range

—*Continued on page 56*

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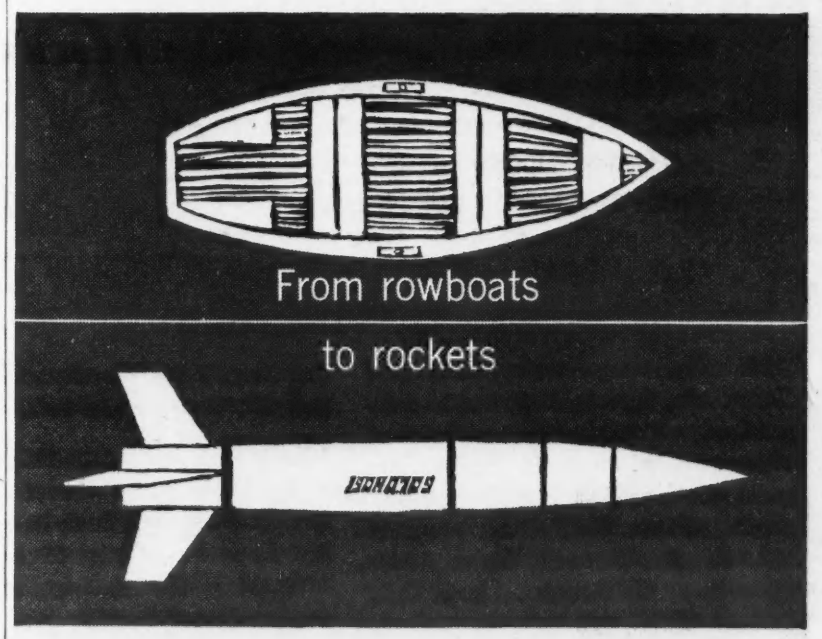


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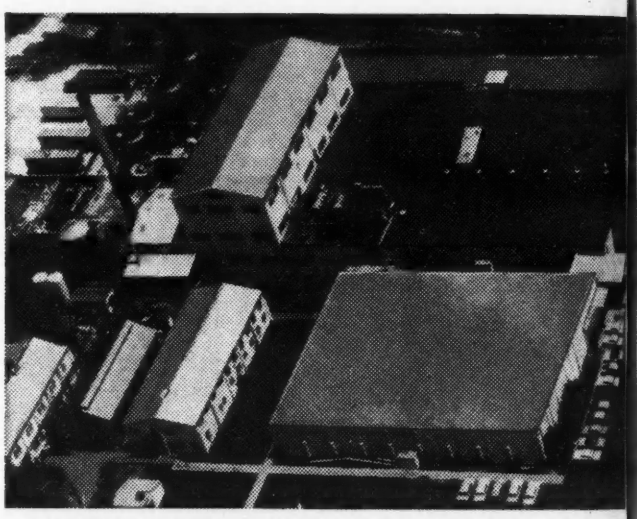
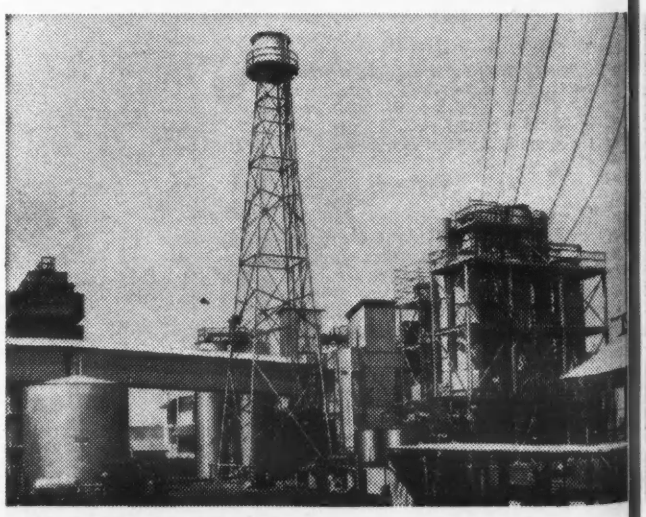


**Florida SUN-FILLED citrus oils** are produced at 3 Minute Maid plants — Plymouth (shown above), Auburndale and Leesburg, Florida.



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# Essential Oils. Aromatics

Five price reductions were made in the various markets. Natural peppermint dropped 60 cents per pound, redistilled peppermint dropped 60 cents per pound, spearmint dropped 25 cents per pound, Mexican cut vanilla beans dropped 15 cents per pound and Mexican whole vanilla beans dropped 15 cents per pound. Reported to be continuing strong are geranium and, of course, sandalwood. The following items were detained at the port of New York: cassia, 20 lots, 1,709 bales; chillies, 2 lots, 620 bags; fennel seed, 82 bags; ginger, 3 lots, 718 bags; ocotea cymbarum oil, 46 drums, and sesame seed, 2 lots, 800 bags.

### Price Trends

**Advanced**

None

**Reduced**

Peppermint, natural, 60c. per lb.
redistilled, 60c. per lb.
Spearmint, 25c. per lb.
Vanilla beans, Mexican cut, 15c. per lb.
Mexican whole, 15c. per lb.

**Comparative Price Indexes**

(100=1949 average)

| Last week | Prev. week | Last month | April 8, 1960 |
|---|---|---|---|
| 143.85 | 144.02 | 144.08 | 147.02 |

*For Current Prices see page* **9**

From published sources comes information that the Soviet Union plans to produce more perfume products. The report says that the emphasis will be on the synthetic materials rather than on the natural essential oils.

Russia is known to have much less a variety of perfumery products than this country has, but apparently now, even on this non-strategic score, the USSR plans to catch up with the United States.

Besides producing more of these products, it is said that the Soviets will improve the quality of the products they already produce.

The idea that Brazil may very soon become a major competitor with India in supplying pepper to the United States, was exprsessed recently by V. M. Patel, president of the India Pepper and Spice Trade Association.

Mr. Patel also said he believes the government of India ought to try to help growers improve the methods of growing pepper vines. According to him, pepper-growing techniques are more advanced in Brazil and Sarawak.

He also said the government ought to exercise proper control over the quality of the pepper that is exported.

From a New York trading company, we reprint the following statistics about pepper production in Brazil:

The 1960 crop amounted to approximately 4,200 tons split evenly between black and white.

Before World War II, when Brazil did not produce pepper commercially, her consumption was estimated to be roughly 1,000 tons. Now, her consumption is estimated to be some 1,500 tons. It is estimated that her exports to Argentina, other parts of South America and Europe were some 2,000 tons in 1960.

## Essential Oils

**Geranium**—Both Bourbon and Algerian material are said to be strong.

**Peppermint**—Both the natural and the redistilled material have dropped in price. Natural dropped from $5 per pound, to $4.40 per pound and redistilled dropped from $5.25 per pound to $4.65 per pound.

**Petitgrain**—South American material continues at its previous price, $2.30 per pound.

It might interest the readers to know that it takes approximately five years for a petitgrain plant to bear fruit.

First the seed is planted in a nursery and then, after about a year, it is put outside so its roots can develop.

Roots develop during the second year and then in three more years, the tree bears fruit and enough leaves to be harvested.

**Sandalwood**—The market continues strong at its extremely high prices. Demand for the oil is said to be good in spite of its price.

Only a few dealers here in the New York area are handling this expensive item.

**Spearmint**—The market is generally weaker.

From the previous price, $5.50 per pound, material has gone down to $5.25 per pound.

## Seeds and Spices

**Allspice**—Jamaican material advanced from 71c. per pound to 72c. per pound.

**Coriander**—The market firmed following reports of drought damage in Morocco. New crop material is expected to be higher priced.

**Celery**—Sales are reported to be unusually slow for this time of year.

**Cinnamon**—Ceylon No. 0000 material has advanced in price from its previous price, 70c. per pound, to 72c. per pound.

**Fennel**—Tightness is reported on spot. For example, Bulgarian material has advanced from its previous low, 16½c. per pound, to 18c. per pound.

**Pepper**—Both the black peppers remained substantially the same as they were in the previous issue. Muntok white, on the other hand, dropped in price. From its previous price, 60c. per pound, it dropped to 58c. per pound.

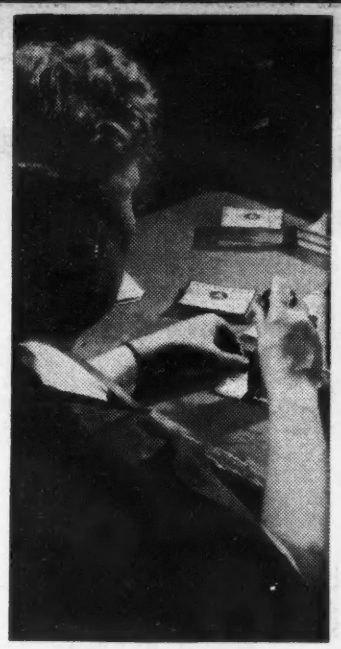
**Vanilla Beans**—Overall, the market is quiet, but relatively firm, dealers report. Madagascar material remains at its previous level, $6.95 to $7.25 per pound.

Mexican material, however, has declined slightly. Cut material is now selling

### Essential Oils Imports: December

| | Principal origin | Net Quantity Pounds | Value |
|---|---|---|---|
| Cinnamon leaf, cinnamon | — | 5,471 | 5,898 |
| Geranium | Madagascar | 10,093 | 404,909 |
| Rose, otto of roses* | France | 841 | 20,590 |
| Bergamot | Italy | 6,137 | 62,979 |
| Citronella | Taiwan | 160,669 | 126,002 |
| Lemongrass | India | 100,568 | 145,945 |
| Lavender | France | 28,692 | 50,565 |
| Lavender spike | Spain | 17,063 | 24,992 |
| Lemon | Italy | 6,531 | 23,880 |
| Lemon, terpeneless | — | 11 | 180 |
| Orange | — | 9,549 | 16,726 |
| Sandalwood | France | 3,676 | 63,519 |
| Lime | Bermuda | 4,407 | 25,047 |
| Camphor | — | 29,250 | 9,094 |
| Caraway | — | 110 | 371 |
| Cananga | — | 2,791 | 21,637 |
| Lignaloe | Peru | 26,033 | 36,690 |
| Palmarosa | — | 400 | 1,646 |
| Petitgrain | — | 2,478 | 5,638 |
| Rosemary | Spain | 35,383 | 33,204 |
| Thyme | — | 55 | 126 |
| Clove | — | 1,440 | 3,384 |
| Eucalyptus | — | 13,183 | 6,818 |
| Patchouli | Indonesia | 19,510 | 95,479 |
| Peppermint | — | 30 | 723 |
| Pine needle | — | 1 | 4 |
| Ocotea cymbarum | Brazil | 107,584 | 37,475 |
| Vetivert | Haiti | 2,773 | 25,350 |

Source: Bureau of Census.
* Ounce.

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## Essential Oils

for $7.10 to $7.40 per pound and whole material is now selling for $7.50 to $8.50 per pound.

### Essential Oils Briefs

**D & O PRESENTS SCHOLARSHIP:** Mr. Kenneth W. Hartley, vice president of Dodge & Olcott, Inc., awarded a $1,000 scholarship to Theodore P. Labuza at the Annual Student's Night Meeting of the Northeast Section, Institute of Food Technologists.

Mr. Labuza is a student at the Massachusetts Institute of Technology. The purpose of the scholarship is to encourage students to take undergraduate work leading to a Bachelor's Degree in food technology, food engineering or food science.

**DAMMANN ELECTS:** Mr. James S. Schmidt has been elected president of the board of directors of Dammann & Co., Inc. Other officers of this company, which is an importer and dealer in vanilla beans, are: Mr. Allan Gerdau, vice president; Mr. G. Winship Taylor, vice president, and Mr. William Farnan, secretary treasurer.

### *Spencer, Southern Oxygen*

*—Continued from page 5*

without the approval of the boards of directors and security holders of both companies and no requests for such approvals have been made by the managements of the respective companies, ne adds.

Spencer in 1959 reached an agreement whereby Southern Oxygen became the exclusive distributor of argon produced by Spencer at its Vicksburg, Miss., works. Spencer produces and markets liquid and gaseous carbon dioxide and cylinder ammonia.

### *Nitrogen Plants Needed*

*—Continued from page 7*

should also make phosphate and N-P-K mixed fertilizers, Mr. Ewell says, pointing out that over-emphasis on nitrogen may lead to depleted soils in the future.

He recommends that the production and sale of mixed fertilizers be promoted "by every possible means," and that intensive research into soil-testing and crop response be undertaken to establish the physical and economic returns on mixed fertilizers.

Mr. Ewell expects that at least some of India's sulfur requirements for fertilizer production will be supplied through the development of pyrites deposits at Amjor, in the Shahabad district of Bihar province. He believes that production of up to 200,000 tons a year (100,000 tons sulfur equivalent) is possible.

Mr. Ewell's comments were reported in the current issue of *Sulphur Institute News*, a publication of the Sulphur Institute.

**IFF SOUTH AMERICA MANAGER: Harry Fields, appointed area manager in South America by International Flavors & Fragrances, Inc., New York.**

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# Oils, Fats and Waxes

Feature of the oils and fats market last week was the further advance in tallow and greases which brought prices to the highest level since August 1958. Increased demand for export combined with the scarcity of supplies boosted the market ¼ to ½ cent per pound, with sellers naming still higher prices. Reports were current that at least 10,000 tons were taken for shipment to Russia, which would boost purchases to 85,000 tons during the past six weeks. The scarcity of basic materials was also reflected in grease oils, which were raised 1 cent per pound and tallow oil 1½ cents.

Stronger soybean futures continued to strengthen cottonseed and soybean oil cash markets which were lifted fractionally. Trading at the higher levels, however, was limited as consumers restricted demand to actual needs. Peanut oil was easier, off ¼ cent because the government announced that 5,000 tons of peanuts will be offered weekly for crushing and export during the next eight weeks. Crude coconut oil was easy and sold at slightly lower levels.

While trading in industrial oils was light and spotty, an active demand was reported against existing contracts. Linseed, oiticica and tung oils moved in larger quantities against former contracts. Prices were unchanged and fairly steady, except tung oil which was easier, due to lower sales of government owned oil.

The President issued a proclamation on April 5 eliminating the special import fees on peanut and linseed oils and flaxseed which become effective May 5. These fees were imposed in 1953 to prevent imports from interfering with price support programs of the Department of Agriculture. On January 26, the Tariff Commission submitted a report to the President recommending the fee on peanut oil be eliminated and fees on flaxseed and linseed oil be reduced from 50 percent ad valorem to 15 percent ad valorem.

### Price Trends

**Advanced**

Cocoa butter, 1c. per lb.
Cottonseed oil, crude, ⅜c. per lb.
Refd., ⅜c. per lb.
Greases, ¼c. to ⅜c. per lb.
Grease oils, 1c. per lb.
Soybean meal, $2 per lb.
Soybean oil, crude, ¼c. per lb.
Refd., ¼c. per lb.
Tallow, inedible, ⅜c. to ½c. per lb.
Tallow oils, 1½c. per lb.

**Reduced**

Linseed meal, 50c. per lb.
Peanut meal, $4 per ton.
Peanut oil, crude, ¼c. per lb.
Refd., ¼c. per lb.

**Comparative Price Indexes**

(100=1949 average)

| Last week | Prev. week | Last month | April 8, 1960 |
|---|---|---|---|
| 108.37 | 109.45 | 109.83 | 114.85 |

*For Current Prices see page 9*

## Vegetable Oils

**Castor**—Demand was spotty. No. 1 Brazilian was held at 17¼c. per pound, tankcars, New York, prompt delivery. Domestic grades were unchanged and quiet.

Imports of castor beans and castor oil at New York and Philadelphia last week were as follows:

| | Pounds | |
|---|---|---|
| | Castor Beans | Castor Oil |
| Last week | | 280,000 |
| Previous week | | 1,300,000 |
| Corresponding week, 1960 | 103,500 | 3,890,000 |
| Total this year | | 21,684,000 |
| Corresponding period, 1960 | 1,502,100 | 25,110,000 |

**Coconut**—Crude was sold at 11c. per pound, tankcars, f.o.b. Pacific coast, prompt shipment and 11⅛c. was asked. The New York market was nominal at 12¾c., tankcars, prompt delivery.

**Corn** — Crude was held at 17½c. per pound, tankcars, f.o.b. mills, prompt shipment following sales at ¼c. less. Refined oil was named at 21.23c., tankcars, New York basis.

**Cottonseed**—Futures continued to advance with soybean futures reaching new season's high for May, July and September on the New York Produce Exchange last week. Trading was active with commission houses and trade interests on both sides. Considerable May changed hands and was readily taken. Switching operations were also active, from May to July and September. Cash oil was stronger and refined salad oil was boosted to 1⅞c. per pound, tankcars, New York, prompt delivery.

Crude cottonseed oil was scarce and moved higher with futures. In the Valley, bids were raised to 13⅞c., tankcars, f.o.b. mills. Market in the southeast was nominal at 14c. to 14⅛c. depending upon location and Waco was nominal at 13⅞c.

### Cottonseed Oil Futures

Sales and prices of prime summer yellow cottonseed oil futures in tankcars (60,000 pounds) on the N. Y. Produce Exchange for the week ended Friday, April 7, follow:

| | Sales | High | Low | Close |
|---|---|---|---|---|
| | | Cents per Pound | | |
| May | 1,621 | 16.28 | 15.51 | 16.07@16.10 |
| July | 1,203 | 16.06 | 15.31 | 15.68S |
| Sept. | 308 | 15.12 | 14.35 | 14.95@15.00 |
| Oct. | 69 | 14.40 | 13.71 | 14.36@14.37 |
| Dec. | 50 | 14.16 | 13.58 | 14.14S |

Total sales and switches, 3,251 contracts.

**Linseed**—Improved demand was noted against existing contracts. Market was unchanged and steady. Raw oil was quoted at 13.1c. per pound, tankcars, f.o.b. Minneapolis, April-June delivery; 13.3c., July-September and 14.22c., tankcars, f.o.b. New York, prompt delivery.

**Olive**—This market continued firm because of active demand for European account. Italy was in the market and absorbed 4,500 tons for shipment from Spain last week. Spanish oil was maintained at $53 to $54 per 100 kilos, drums, f.o.b. ports, prompt shipment. Tunisian oil ranged from $56.50 to $57, per 100 kilos, c. and f. New York. The local market was quiet and unchanged at $2.35 to $2.40 per gallon, drums, duty paid, ex-warehouse, as to quantity.

**Peanut**—Buying interest was reported light. Crude was easier and sold at 15c. per pound, tankcars, f.o.b. mills, prompt shipment. Refined oil was lower at 18¼c., tankcars, New York delivery. The government indicated that about 5,000 tons of peanuts will be offered for export or crushing weekly during the next two months, which created an easier tone in the market.

**Rapeseed**—Demand was spotty, but the market was firm at the recent advance. Stocks were light and maintained at 17c. per pound, tankcars, New York, prompt delivery. Drums were held at 18½c. to 18¾c., spot, according to quantity.

**Soybean**—Sharply higher soybean futures due in part to the expectations of improved business shortly to Spain who will receive offers for 25,000 tons this week was reflected in cash oil. Crude oil was nominal at 13⅜c. to 13½c. per pound, tankcars, f.o.b. Decatur, unrestricted for prompt shipment. Refined salad was lifted to 15⅝c., tankcars, New York basis.

**Tung**—Trading was slow, but deliveries were in improved demand. Tankcars ranged from 27¼c. to 27½c. per pound New York, prompt delivery. Drums ranged from 28¾c. to 29¼c., spot, as to quantity.

CCC sold only 30,000 pounds of tung oil at 27c. per pound, bulk, f.o.b. Marrero, La., last week and other bids for 200,000 pounds were rejected. CCC will increase offers to 600,000 pounds on April 18.

## Miscellaneous

**Cocoa Butter**—This market closed firmer, advancing 1c. Stocks on spot ranged from 54c. to 59c. per pound, according to quantity.

**Flaxseed**—To-arrive bookings of cash flaxseed again reached substantial total in continuation of active trading which began a fortnight ago. Offerings diminished when feed grains began to show strength. Navigation on the Great Lakes is expected to begin no later than April 15, bringing relief to the extremely tight storage situation at the head of the Lakes.

Bids were advanced to $3.08 per bushel, spot and to-arrive, basis Minneapolis.

## Fats and Greases

**Greases**—Further advances of ¼c. to ⅜c. per pound took place last week because of active export demand. Trading was limited because of the scarcity of offerings. Choice white grease ranged


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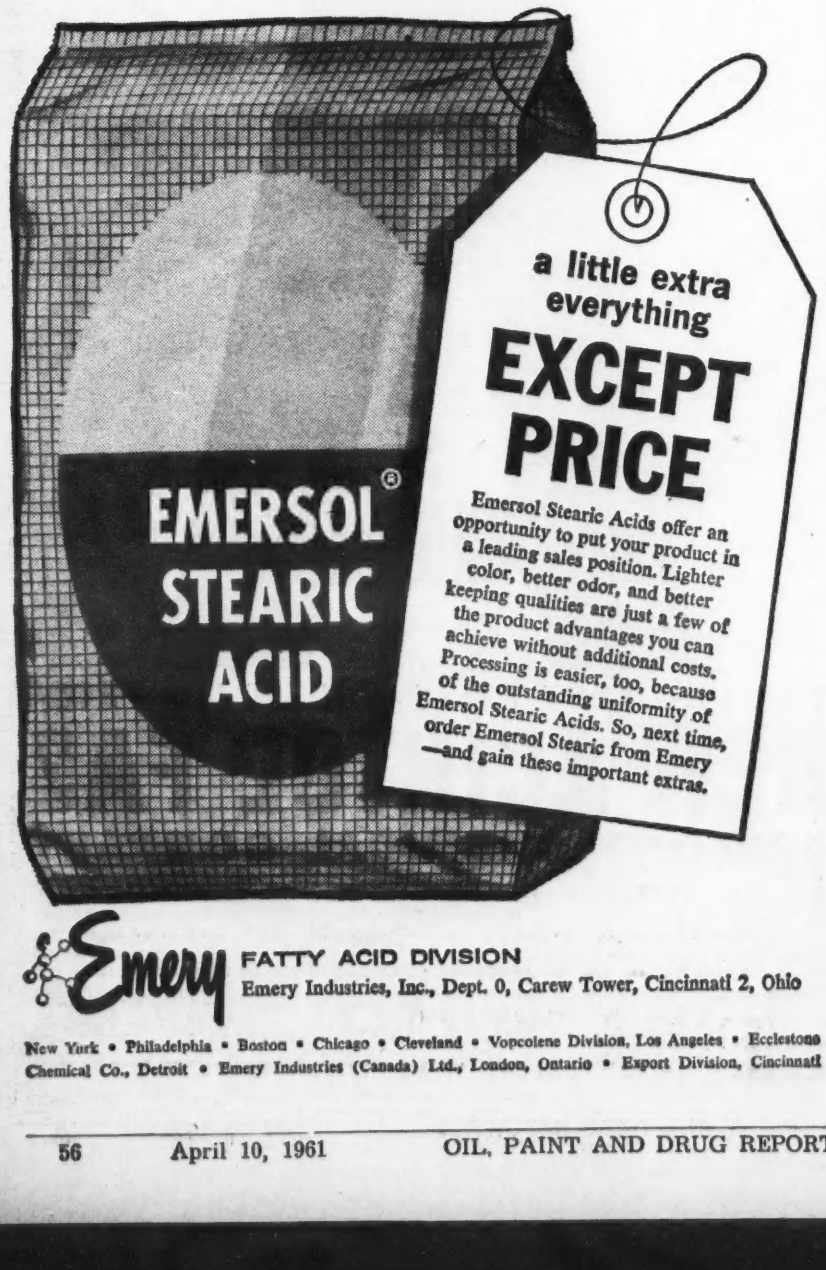
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## Oils, Fats and Waxes

from 9¾c. to 9⅞c. per pound, tankcars, delivered, and yellow from 7⅞c. to 8c., same basis.

**Lard**—Market was irregular and closed unchanged. Cash lard was quoted at 13c. per pound, drums, Chicago.

**Tallow**—Continued active demand chiefly short covering further strengthened this market. Advances ranged from ⅜c. to ½c. per pound. Offers continued scarce with sellers holding above the higher levels. Unconfirmed reports indicated about 10,000 tons had been purchased for Russian account. Previous sales amounted to 75,000 tons in the past six weeks. Bleachable fancy was nominal at 8½c. to 8⅝c. per pound, delivered; prime, 8¼c. to 8⅜c.; guaranteed fancy, sold at 9c.; special, 8c. to 8⅛c. nominal, and No. 1, 7⅞c. to 8c. Guaranteed fancy was nominal around 9½c., bulk, f.o.b. steamer and 10½c., drums, f.a.s.

### Cake and Meal

**Cottonseed Meal**—Trading was light and spotty. Prices were fairly steady. Meal 41 percent was quoted at $55 to $55.50 per ton sacked, Mississippi Valley and $59 to $60, Alabama-Georgia area.

**Linseed Meal**—Modest improvement developed in truck and carlots. Extracted meal was 50c. lower and old process, $2 per ton. Area crush was active but consumers tended to hold purchases to nearby needs. Extracted meal, 34 percent protein, was held at $53 a ton, bulk, in carlots, f.o.b., Minneapolis. Old process declined $2 to $58.50, April-July.

**Soybean Meal**—Demand was only fair in this market but declines were held in check by sharp cutbacks in western production. Best call was for 50 percent protein meal, seasonally improved on better demand for chick starters. Meal for unrestricted billing was advanced $2 per ton. Soybean meal, 44 percent, was held at $69.50 a ton, unrestricted, bulk, Decatur, prompt delivery.

### Waxes, Vegetables

Increased cost of carnauba wax replacements from Brazil of about 5c. per pound stiffened the local market and resulted in increased interest for prompt and future needs. Good volume of business was reported for spot and summer delivery while offers for Fall delivery were scarce and practically unavailable. Prices of all carnauba grades were unchanged and firm, tending higher. No. 3 Ceara crude ranged from 60c. to 62c. per pound, spot, as to quantity and Parnahyba was 2c. higher. Yellows were also firm and unchanged. No. 1 yellow was quoted at 87c. to 89c., spot and Parnahyba, 2c. higher. Other vegetable waxes continued in spotty demand, at unchanged prices, chiefly for actual needs.

## Coating Materials

—*Continued from page 51*

of 15⅜c. to 15½c. to 15¾c. per pound showed slight improvement from previous weeks. While prices failed to attract large-scale buying, the consensus seemed to indicate that casein prices had about hit bottom. The slow downward spiral of prices over the past seven or eight months shows indications of being checked, according to this view.

### Coating Materials Briefs

**ACRYLIC EMULSION CUT:** A reduction in the price of "U-7001" acrylic emulsion has been announced by UBS Chemical Company, Cambridge, Mass. The emulsion used in gloss latex paints is now available at a delivered price of 44c. per pound, or 6c. per pound lower than the old price, the company reports.

**COATING PRICE CUT:** Metal & Thermit Corporation, New York, has reduced prices on some of its spray-applied coating materials. The lower prices amount to an 8c. per pound decrease on all colors and quantities of the "Unichrome Super 5300" series. The price of "Unichrome Super 5300" (green, gray or black) has been reduced from 83c. to 73c. per pound in one-gallon quantities and from 67c. to 59c. per pound in 100-pound drums or larger shipments, f.o.b., Carteret, N.J.

**ROSIN ULTIMATUM:** Judge Harley Langdale, President of the American Turpentine Farmers, last week announced a program designed to stabilize the price of gum rosin.

The association has asked its members to place all rosin production into the 1961 Commodity Credit Corporation loan unless a price of at least $11.50 per hundredweight can be received at the processing plants.

The objective of this recommendation is to maintain rosin prices in the range of $12 to $14, f.o.b. southern shipping points, according to the association.


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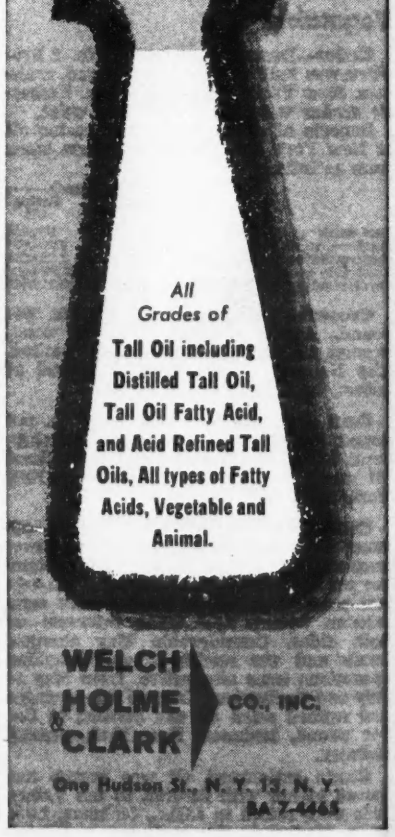


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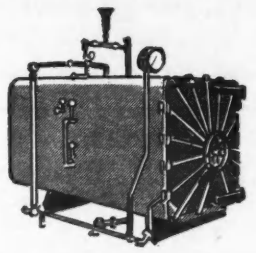
**Raymond Hi-Side Mill #5057**
**Royle No. 1 Jktd. Extruder**
**Flash Drying System in Type 316 Stainless**
**Hardinge Conical Ball Mill; 8" x 36" with accessories**
**F-B Unused Late Type 2 Roll Mills; 14" x 30"**
**2 Cornell Type "C" Versators; 316 SS**
**Sandvik 24" wide SS Belt Dryer**
**Standard Knapp #429 Aut. Gluer-Sealer**
**Cherry Burrell S/S No. 1500 Homogenizer**
**Alum. Bubble Cap Column; 27½" x 36'**

## FIRST'S WEEKLY FEATURE

**SAVE $2200. on This AMERICAN STERILIZER**



**Horizontal Jacketed Double Door with steel Carriage on track; 30" x 48" x 84"**

**SPECIAL OFFERING DIRECT FROM LOCATION**
**CONTINUOUS FINE GRINDING EQUIPMENT**
**Being Removed as Operations Terminate**

**2—Allis Chalmers 7' x 22' (2 Compartment) Compeb Ball Mills with Meehanite Liners, driven by a magnetic-coupled 400 HP Motor.**
**1—Allis Chalmers 9½ x 810 Preliminator or Continuous Ball Mill; Meehanite Liners, driven by a magnetic-coupled 400 HP Motor.**
**3—Allis Chalmers 7' x 22' Continuous Ball Tube Mills, with Meehanite Liners, each driven by a magnetic-coupled 400 HP Motor, now operating in closed circuit with**
**3—Raymond 14 Ft. Double Whizzer Mechanical Air Separators, New in 1950, each driven by 75 HP Motor. May be purchased separately. PRICED FOR IMMEDIATE DISPOSAL.**

### CENTRIFUGES

**Stainless Centrifugals from 30" to 60"; A.T.&M. Tolhurst, Fletcher, etc.**
**2 Sharples Stainless Steel Model PN14 Super-D-Canters.**
**4311 S 1 Sharples C 27 Super-D-Hydrator in Type 316 Stainless with 40 HP**
**5147 S 13-14 Two Bird Continuous Screen Type Horizontal Centrifuges; Monel & S.S.; 24" x 24".**
**2 Bird Rubber Covered, 48" with Plows; Fume Tight; 40 HP.**

### REACTORS—PRESSURE VESSELS

**2 Stainless 400 gal. Reactors Jktd. Agtd. by Patterson and Struthers Wells.**
**6 Dorr-Oliver Stainless Steel Thickeners or Reaction Vessels; 550 gal. 5' x 5'.**
**Stainless Reactor, 2000 gal. Fully Jktd. Agitated.**
**Nickel Clad Reactor, 7'x11'6".**
**2 MONEL Reactors; 2800 gal. 6'8"x13'; ASME Jktd. & Intern.**
**Lancaster Stainless Lined Rotary Reactor or Digester; 50" x 17'4"; Jacketed; good for 300 PSI Internal.**
**Pfaudler Gl. Lined Reactors; all sizes from 50 to 500 gal.**
**Mojonnier Stainless Vac. Pans; 3'x10' and 6' x 12'; others.**

### EVAPORATORS—DRYERS

**Buflovak S/Steel Thermo-Recompression Evaporator.**
**Link Belt Roto Louvre Dryer model 502-20.**
**Pittsburg Lectro Dryers, Bac 25 and BWC 3400.**
**Devine Vac. Chamber Dryers, Double Door Model No. 36.**
**Stainless Lab. Drum Dryer, 8"x11½".**
**Bowen S/S Lab. Spray Dryer.**

### MIXERS ALL TYPES

**Baker Perkins Jktd. 5 gal. UNE-7, Dbl. Arm Mixer with pressure cover; 30 HP.**
**Readco Jktd. 15 gal. Dbl. Arm Sigma Blade Mixer.**
**BLAW-KNOX 600 cu. ft. Conical Blender; 9'6" Dia.**
**Baker Perkins Jktd. Mixers, 50 gal., 150 gal., 200 and 300 gal.**
**J. H. Day Cincinnatus Dbl. Arm Mixer; 300 gal. STAINLESS Jacketed.**

**NOW IN STOCK for IMMEDIATE DELIVERY. ALL SIZES FALCON Ribbon Blenders in Steel or Stainless.**

### MILLS—PULVERIZERS

**2 Stainless Steel Micronizers 30".**
**Abbe, Ball & Jewell Rotary Cutters; in a wide range of sizes, capacities.**
**Ball Mills and Pebble Mills by Abbe, Patterson, International, some Jacketed; up to 8' x 8'.**
**Mikro Pulverizers up to No. 4's.**
**Fitzpatrick Comminutators; Models M, K and C; motorized.**
**American Ring Roll Crusher; 50 HP.**
**Mikro S/S Atomizers; Nos. 6 and 5.**
**Raymond Imp Mills; many sizes.**
**Williams Hammer Mills to 60 HP.**

### OLIVER PRECOAT FILTERS

**3" x 2" Monel. 5'3" x 8' Stainless.**
**(2) 5'3" x 3" Steel or Rubber.**
**Feinc S/S Rot. Vac. Filter 3' x 1'.**
**Oliver Cont. Rot. Vacuum Filters.**
**Panel Type; 8' x 8' and 8' x 10'.**

### FILTERS—FILTER PRESSES

**4 Pressure Filters 30" x 56" Type 316 Stainless; 100 sq. ft.**
**Sparkler S/S Filter Model 14 S 4.**
**Sparkler Steel Filter Model 33 S 17.**
**S/S Nutsche Type Filter; 6' x 2'.**
**Bowser Filter with Pump; 2000 GPH.**

### PLASTIC and RUBBER EQUIPMENT

**Unused F-B 14" x 30" Two Roll Mills**
**Good used 2 Roll Mills, 12"x24", 22"x60"**
**6 Southwark Presses, 36" x 36", 14" Ram**
**Stewart-Boiling Press 36" x 36", 22" Ram**
**HPM Self Cont. Presses, 7 and 25 Ton**
**EXTRUDERS: NRM 1½"; NRM 6" Rubber Tuber.**
**Royle 2" Extruder; Hydraulic Strainer 15"**
**VULCANIZERS: 6'x16', 41"x54", 2'x4', others**
**Utility Rubber Stock Cutter with Conveyor**
**Baker Perkins 150 Gal. Disp. Mixer, 150 HP**
**J H Day Mogul Mixer 150 Gal. V/Cov. 75 HP**
**Baker Perkins 5 Gal. Disp. Mixer, 30 HP**

## FIRST MACHINERY CORP.

**209-289 TENTH STREET, BROOKLYN 15, N. Y.**

**FMC Pays MORE For Your Surplus**

**PARKING ON THE PREMISES**
**Phone: STerling 8-4672**
**Cable Address: "EFFEMCY"**

FMC

# BRILL FOR VALUES

### CENTRIFUGES

2—Sharples C-20 and C-27 Super-D-Hydrator, 316 S.S.
**1—Bird 18"x28", Solid Bowl, Continuous, 304 S.S.**
**2—Bird 24" x 38" Solid Bowl Continuous 304 SS.**
1—Bird 36" x 50" solid bowl continuous, 347 SS.
**1—Bird 40" x 60" solid bowl continuous, 316 SS, UNUSED.**
3—Sharples PY14, PN14 Super-D-Canters 316 S.S.
**2—Fletcher 48" Suspended 316 S.S. Perforated Basket.**
2—Sharples #16, 304 S.S., 3 HP motor.

### REACTORS — EVAPS — CONDS — TANKS

1—100 gal. 304 S.S. jacketed agitated Reactor.
3—Pfaudler 200 gal. glass lined jacketed Kettles.
**1—300 gal. Hastelloy B jacketed kettle.**
1—650 gal. 304 S.S. Reactor with 100 sq. ft. Bayonet Heater.
1—550 sq. ft. Buflovak monel single effect Evaporator.
**1—500 gal. S.S. Mixing Tank with nickel coils.**
1—2,000 gal. horizontal 304 S.S. tank 5' x 12'.
1—10,000 gal. rubber lined Tank, 10' x 17'6".
1—2,500 gal. vertical 304 SS Tank, 8' x 7'.
**6—7500, 6000 and 2000 gal. Rubber Lined Tanks.**
1—12,000 gal. horiz. steel Pressure Tank, 7'6"x36', 200 psi.
2—Glascote 26 sq. ft. glass lined jacketed Condensers, UNUSED.
4—Stainless Heat Exchangers; 536, 370, 315, 250 sq. ft.
1—24" dia. x 35', 304 S.S. Bubble Cap Column.

### FILTERS

**1—#5 Sweetland Filter 304 S.S. 120 sq. ft.**
1—Oliver 6' dia. Horizontal Filter, 316 S.S.
1—Oliver 5' x 6' Steel Rotary Vacuum Precoat Filter.
**1—U.S. 200 sq. ft. 304 S.S. Auto-Jet Filter.**
**1—Hercules 400 sq. ft. 304 SS pressure Filter.**
**1—Oliver 5'3"x8' Steel Rotary Vacuum, vaportite housing.**
**1—Feinc 5'x6' Stainless Steel Rotary Vacuum Filter.**
1—Feinc 3' x 3' Stainless Steel Rotary Vacuum Filter.
2—Feinc 3' x 1' and 3' x 3' Stainless Steel Rotating Vacuum Filters, string discharge.
2—#10 Sweetland Filters, 27 leaves, 4" centers, 250 sq. ft.

### DRYERS

1—Buflovak Vacuum Shelf with 17—60" x 80" shelves.
**2—Buflovak 42"x120", atmospheric double drum Dryers, complete.**
**1—Buflovak 32" x 90" Atmos. Twin Drum Dryer.**
2—Devine 4'x9', single drum, atmospheric.
**1—Buflovak 3'x10' Rotary Vacuum Dryer.**
1—Baker Perkins 5'6"x6' Rotary Vacuum Dryer.
6—Louisville Rotary Steam Tube 5'x25', 6'x30', 6'x50'.
**2—Louisville 8'x50' Stainless Steel lined Rotary Dryers.**
9—Rotary Dryers 34"x30', 4'x40', 6'x50', 6'x60', 7'x80', 8'x87'.
1—Louisville 4-1/2' x 25' Inconel Rotary Dryer.
2—Link Belt, 7'5"x25', 6'4"x24", S.S. Louvre Dryers.
**1—Stokes Model 38-A Tray Dryer with 16—36" x 36" SS shelves.**
2—Atmos. Tray Dryers, 16 shelves, 40"x24".
**1—P&S 6' wide Apron Conveyor Dryer 48' long.**
2—Wyssmont Dryers, 304 SS, 6'2" and 9'6" dia.

### MIXERS

**1—Abbe 110 gal. 304 SS Jacketed Agitated Vacuum Dispersal Mixer.**
**2—Day Imperial 150 gal. jktd. double arm.**
2—Baker Perkins 150 and 100 gal. jacketed double arm sigma blades.
1—Baker Perkins 50 gal. jacketed, double arm.
5—Day "Cincinnatus" double arm, 250 and 100 gal.
2—Steel jacketed Powder Mixers, 225 and 350 cu. ft.
1—Patterson 6' dia. Conical Blender 15 HP.
1—3' dia. Simpson Intensive Mixer.
**1—2' dia. Simpson Intensive Mixer, 304 SS.**
**1—45" dia. Lancaster Mixer, 7-1/2 HP motor.**
1—Patterson Kelly 150 cu. ft. Twin Shell Blender.
1—Sprout Waldron 1500# 304 SS Powder Mixer, 15 HP motor.

### MISCELLANEOUS

**3—Kinney Vacuum Pumps, 1000 cfm, 10 micron, 15 HP.**
2—Hardinge 5' x 22" steel lined conical Ball Mills.
4—Mikro Pulverizers, #4TH, 1SH, 1SI and Bantam.
3—Abbe 2½' x 3' porcelain lined Pebble Mill XP motor.
1—Raymond 10" vert Mill, 10 HP.
1—No. 1 Ball & Jewell Rotary Cutter.
1—#18 Cumberland Rotary Cutter.
3—Swenson Walker Continuous Crystallizers, 24" x 30' sections.
2—#842 Rotex Sifters 60" x 84" double deck.
**1—#24 Rotex Sifter, 20" x 64", Quadruple deck.**

***Partial List of Values — Send for Complete Circular***

**TEXAS OFFICE: 4101 San Jacinto Street, Houston 4, Texas — Tel.: JAckson 6-1351**

## BRILL EQUIPMENT COMPANY

**35-61 JABEZ ST., NEWARK 5, N.J. Tel.: MArket 3-7420**

# PERRY FOR PROCESS EQUIPMENT

## SELECTED RECENT PURCHASES

**1—OLIVER 50 SQ. FT. STAINLESS PRESS—LEAF FILTER.**
**1—EVAPORATOR, DOUBLE EFFECT, STAINLESS, TOTAL 370 SQ. FT.**
**1—BAKER PERKINS 100 GAL. T347SS DISPERSION MIXER, JKT.**
**2—600 GAL. STAINLESS PRESSURE TANKS, DISHED, COILS, AGIT.**
**1—ALLIS-CHALMERS 5' x 5' CONTIN. BALL MILL, 75 HP DRIVE.**
**1—NERCO-NIRO PORT. STAINLESS LAB. SPRAY DRYER.**
**1—FLETCHER 30" UNDERDRIVEN STAINLESS CENTRIFUGAL.**
**6—VALLEY 36" ALUMINUM P. & F. FILTER PRESSES, CLOSED DELIVERY, 65 CHAMBERS, HYDRAULIC CLOSURE, 1000 SQ. FT.**
**2—DAVENPORT #3A DEWATERING PRESSES.**

### DRYERS

2—Louisville 6' x 30' rotary steam-tube dryers.
5—F. J. Stokes #138J-16 vac. shelf dryers, 195 sq. ft., 16 shelves, 40" x 44".
**5—BUFLOVAK 42" X 120" DRUM DRYERS, ASME 160#.**
1—American 42" x 120" dbl. Drum dryer, ASME, stainless.
1—Buflovak 42" x 90" dbl. drum dryer.
**1—AMERICAN 36" X 84" DBL. DRUM DRYER, ASME, VACUUM.**
**1—BUFLOVAK 5' X 12' SINGLE DRUM DRYER, VACUUM.**
1—Buflovak 32" x 52" dbl. drum dryer, ASME 100# WP.
1—Buflovak 6" x 8" dbl. drum dryer, vacuum.
2—Buflovak Vacuum shelf dryers: 110, 98 sq. ft.
**2—DAVENPORT 8' X 60' ROTARY DRYERS, 7/16" WELDED.**
1—Louisville 4'6" x 25' rot. steam-tube dryer, welded.
1—Hardinge 4' x 30' rot. steam-tube dryer.
1—Bartlett 3' x 15' rotary dryer, everdur shell.
**1—BOWEN STAINLESS LAB. SPRAY DRYER.**

### FILTERS — CENTRIFUGALS

**5—SHRIVER 48" CAST IRON FILTER PRESSES, 1250 SQ. FT.**
**6—VALLEY 36" ALUMINUM FILTER PRESSES, 1000 SQ. FT.**
1—Niagara #510-28 T316SS pressure filter.
**1—OLIVER 5'3" x 8' PRECOAT ROT. VACUUM FILTER—UNUSED.**
2—Oliver 5'3" precoat T316 SS rot. vacuum filters.
**10—DAVENPORT DEWATERING PRESSES; #1A, 2A, 3A.**
**25—SHARPLES #AS-16V SUPER CENTRIFUGALS, INCONEL, SLUDGE DISCH.**
3—Sharples #C-20, C-27 Super-D-Hydrators, T316SS.
2—Sharples #16-P cont., T304SS, pressuretite.
1—Bird 32" x 50" cylindrical contin. cent., T316SS.
**1—TOLHURST 48" SUSP. CENT., T304SS.**
1—Bird 40" susp., steel Imperf. basket.
**5—A.T.&M. 40" SUSP. CENT., T304SS.**
2—A.T.&M. 32" Susp. Cent., T304SS.
1—A.T.&M. 12" Susp. Cent., T304SS.
2—DeLaval #BUH Stainless hermetic clarifiers.

### KETTLES — REACTORS

**1—1800 GAL. T316SS REACTOR, JKT. & AGIT., VACUUM.**
3—1350 gal. T347SS Kettles, Jkt., paddle agit.
1—1000 gal. Dopp Kettle, cast iron, Jkt. & Agit.
2—600 gal., T304SS, Jkt., Agit., Coils.
2—500 gal. T304SS Reactors, Jkt. ASME, UNUSED.
**6—465 GAL. T304LSS REACTORS, 150# IWP, 165# JKT.**
2—125 gal. T316SS Kettles, shell Jkt.
2—100 gal. T304SS Autoclave, shell jkt.

### MIXERS

**50—BAKER-PERKINS #17, 200 GAL. SIGMA JKTD. MIXERS.**
**1—BAKER PERKINS #16-UUEM, 150 GAL. DISPERSION MIXER, 150 HP XP MOTOR, 125# JACKETED, VAULTED COVER.**
**1—BAKER PERKINS #15, 100 GAL. DISP. BLADES, JKT., T347SS.**
**1—BAKER-PERKINS #15-UUMM, 100 GAL. DISPERSION MIXER, 100 HP, ASME JACKET, CORED BLADES, COMPRESSION COVER, MOTORIZED TILT.**
**1—BAKER-PERKINS #15, 100 GAL. DISP. MIXER, T347SS, JKT.**
1—J. H. Day #6 Cinc., 100 gal., sigma blades, Stainless.
2—Baker-Perkins #15, 100 gal., sigma jktd. mixer.
2—J. H. Day #5 Cinc., 75 gal., sigma blades.
1—J. H. Day #2 Cinc., 20 gal, jktd., sigma blades.
**1—GEMCO 60 CU. FT. T304SS CONICAL BLENDER.**

### STAINLESS STEEL TANKS

1—5700 gal. horiz., T304 SS, 6'4" x 24', UNUSED.
1—3300 gal. vert., T304 SS, 6' x 14', dished heads.
1—3000 gal. vert., T304 SS, 6' x 15', coils, Vac.
**3—2750 GAL. VERT., T316 SS, 7' x 8', DISHED HEADS, COILS.**
2—2300 gal. vert., T316 SS, 7' x 8', coils, agit.
**4—2250 GAL. VERT., T316 SS, 7' x 6'3", DISHED HEADS.**
1—2100 gal. vert., T316 SS, 6' x 9'10", cone bottom.
12—1750 gal. vert., T304 SS hoppers, 235 cu. ft.
1—1600 gal horiz., T304 SS, 5' x 11', dished heads.
6—685 gal. vert., T316 SS, 3' x 13', coils.

### WEEKLY FEATURE!

**1—VULCAN 60" DIA. x 35 PLATE T316 STAINLESS BUBBLE-CAP COLUMN, VACUUM.**

**PERRY EQUIPMENT CORP.**
**1407 N. SIXTH ST., PHILA. 22, PA.**
**Phone: POplar 3-3505**

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**2—OLIVER PRESS PRECOAT FILTERS 5'3"—Type 316 S.S.**
**4—RIBBON BLENDERS, 2500 gal., 1200 gal.**
**2—AUTOCLAVES S.S., 50 gal. 2000 lb., 3½ gal., 2000 lb.**
**1—DRUM DRYER, Proctor & Schwartz.**
**4—COLLOID MILLS, 5 HP EX PR., 15 HP, 40 HP.**

**Machinecraft Corporation**
800 Wilson Avenue, Newark 5, New Jersey
Mitchell 2-7634

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## EQUIPONOMICS

BIRD Continuous Centrifuges 18" x 32" 316 S.S. (1952) 15 H.P. Washing

OLIVER VACUUM FILTER—S.S 316. 3'x6'
COLUMN S.S. 4' D x 65' high, 55 plates.
TANKS S.S. 304, 2500 gal. 7' x 8' new.
KNEADER MASTER—Paterson 2½ gal.
CENTRIFUGE—Tolhurst 20" rubber lined.
COLLOID MILL—Premier UB5 S.S. 5 H.P.
LOUISVILLE ROTARY DRYER 1' x 8'—S.S.
CENTRIFUGE—ATM Susp. 48" 316 S.S.
ROLLER MILLS—Ross 14" x 32" Hi Speed Russ 4½" x 10".

**PROCESS PLANTS SERVICE, INC.**
**287 Central Ave., Clark, N.J. Tel. FUlton 1-1193-4**

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## BEST BUY

**4 — #12 SWEETLAND FILTERS**

**72 leaves on 2" centers. Vertical sight glasses. Auto sluicing devices and hydraulic closing devices.**

**Excellent Condition**

ME MACHINERY AND EQUIPMENT CO

---

## DAY HY-R SPEED MILL
## HERSEY 5' x 26'
## ROTARY STAINLESS DRYER

**CENTRIFUGALS—12" 30" 40" & 48". Amer. Tool 18' Stainless.**
**CENTRIFUGES—Sharples #5 & 6 S.S.**
**DRYERS—Hersey 5' x 26' Rotary Stainless**
**Buffalo 32" x 90" Double Drum Dryer**
**Buffalo Vac. Drum Dryer 24" x 28".**
**Despatch Ovens Elec. Heated.**
**2—Devine & Stokes Vac. Shelf Dryers.**
**FILLERS—Powder & Liquid. Also Labelers.**
**FILTERS—#2 Sweetland 12 Stainless covered leaves.**
**Hercules Filter 36".**
**Ertel 6" & 10" Disc type.**
**FILTER PRESSES—6" to 36" Iron & Wood.**
**KETTLES—Stainless Jack. 20 to 500 gals.**
**Dopp 350 gal. Cast Iron Jack. Vacuum.**
**Devine Impreg. Units 30" & 36" dia.**
**Steel Alum & Copper 5 to 2,000 gals.**
**MILLS—Raymond #98 Pulverizer 30 HP complete. Also #5080.**
**Mikro Pulverizer #4, 2S1, 2TH, 1SH.**
**Hammer Mills & Pulverizers 3 to 50 HP.**
**Williams #3 & #2XX Hammer Mills.**
**Taylor-Stiles 7½ HP Cutter.**
**Rotary Cutters 1 HP & up.**
**Sprt-Wald Stainless Spike Crusher.**
**Pebble, Jar & Ball Mills, Lab to 6' x 8'.**
**3 Roll, 9" x 24", 12" x 30", 16" x 40".**
**Lehmann 4 Roll W. C. 12" x 36" Steel.**
**MIXERS—Baker Perkins 100 gal. Jack.**
**B. P. 15 HP—Masticator Mixer.**
**Day Imperial 75 & 150 gal.**
**Change Can Mixers 8, 15, 40, 80 gal.**
**Day Jumbo 700 gal. horiz. Mixer.**
**Sprout-Waldron 10,000# horiz. Spiral Mixer.**
**Blystone 3000# horiz. spiral Mixer.**
**Day 1000# horiz. Dry ribbon Mixer.**
**Dry Spiral Mixers 50 to 10,000#.**
**Lancaster 6' dia. 25 HP & #1, 3 HP.**
**PUMPS—Vacuum 10 to 500 CFM.**
**Gould 75 HP Centrifugal 250 PSI.**
**SIFTERS—Day, Robinson Rotex type.**
**SOAP MACHINERY—Toilet, Laundry, etc.**
**TABLET MACHINES—Colton 4½ T.**
**Stokes R single punch & RD1 rotary.**
**TANKS—Stainless, GL., Lined, Steel.**
**MISC. Boilers Gas & Oil. Conveyors.**

**Partial Listings — Write for Bulletins**

**STEIN EQUIP'T CO.**
**107 8th St., Brooklyn 15, New York**
**STerling 8-1944**

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# PROCESS PLANTS

**FOR SALE OR LEASE (ALL OR PART)**

## NORTH LITTLE ROCK, ARKANSAS

### NITRIC ACID SYNTHESIS PLANT

**90 ton/day design capacity — 135 ton/day peak capacity — stainless steel tanks, condensers, compressors, etc. — 3 identical lines.**

### NITRIC ACID CONCENTRATING PLANT

**80 ton/day design capacity — 96 ton/day peak capacity — concentrators, ammonia tanks, stainless steel tanks, etc. — 8 identical lines.**

### SULPHURIC ACID RECOVERY & CONCENTRATING PLANT

**Capacity 52,392 tons/year — 4 identical lines.**

### PICRIC ACID & AMMONIUM PICRATE PLANT

**(9) identical units — 18 identical lines — 18,500 lb./day total capacity picric acid — 112,500 lb./day design, 180,000 lb./day peak total capacity ammonium picrate — Pfaudler glass-lined jacketed reactors, nitrators, sulphonators, stainless steel tanks, ammoniators, Fume Recovery.**

### STEAM POWER PLANT

**(5) Comb. Eng. Water Tube Boilers, gas or oil fired, each 4620 sq. ft. heating surface, 300 PSI, cap. 34,500 pounds each of saturated steam per hour.**

***800 ACRE DEVELOPED SITE — ALL UTILITIES AVAILABLE!***

**PERRY EQUIPMENT CORP.**
**1407 N. SIXTH ST., PHILA. 22, PA.**
**Phone: POplar 3-3505**

# EQUIPMENT
## for CHEMICAL AND ALLIED INDUSTRIES

**2—Pfaudler Series R 5000 gal. glass lined jacketed reactors complete with agitators and drives (NEW).**

1—Pfaudler Series XL 1000 gal. glass lined jacketed reactor complete with agitator and drive.

2—Pfaudler 300 gal. glass lined jacketed reactors complete with agitators and drives.

5—Pfaudler glass lined jacketed reactors, 20 gal., 100 gal. and 200 gal. complete with agitators and drives.

1—Blaw Knox 300 gal. stainless steel vacuum receiver with coils.

1—Blaw Knox 275 gal. stainless steel jacketed reactor complete with agitator and drive.

1—Whitlock Type 316 stainless steel jacketed reactor, 600 gal. complete with agitator and drive.

1—Hersey stainless steel rotary dryer, 3'x20'.

3—Buflovak stainless jacketed rotary vacuum dryers, 3'x15' and 5'x30'.

**2—Blaw Knox 200 gal. nickel jacketed reactors, 175 psi jacket, 175 psi internal.**

1—Buflovak 42"x100" double drum dryer complete.

1—American 42"x120" double drum dryer complete.

2—Stokes single door vacuum shelf dryers, 6 and 8 shelves.

1—Stokes 3'x4' single drum flaker complete.

2—Swenson Type 316 stainless steel vacuum crystallizers, 3'6"x12' and 2'x12'.

1—Stewart Bolling 2 roll chrome plated, plastic mill 8"x16".

2—Mikro #3TH stainless steel pulverizers complete with 40 HP motors.

6—Western States 40" Type 316 stainless steel suspended type centrifuges complete with perforate baskets, plows and 40 HP motors.

1—Sharples Type 316 stainless steel Super-D-Canter, PN 14.

**2—Theo. Walters 300 gal. Hastelloy B jacketed reactors.**

1—Sharples Type 316 stainless steel centrifuge, D-2.

2—Process Engr. stainless steel vertical storage tanks, 10,000 gal. (NEW).

1—Vulcan stainless steel bubble cap column 4'x25 plates.

1—Badger stainless steel bubble cap column 42" dia. with 11 trays.

1—Badger stainless steel bubble cap column 36" dia. with 8 trays.

1—Oliver stainless steel rotary vacuum filter 3'x4'.

15—Robinson stainless steel double ribbon blenders, 255 cu. ft.

1—Robinson stainless steel double ribbon blender, 125 cu. ft.

1—Cleaver Brooks 500 HP package steam generator, 200# pressure.

1—Cleaver Brooks 150 HP package steam generator, 150# pressure.

**1—Superior 300 HP package steam generator, 125# pressure.**

**R. GELB & SONS, INC.**
UNION, NEW JERSEY Est. 1886 MUrdock 6-4900

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**CHEMICAL PLANT SALE**
NIAGARA FALLS, N.Y.

Stainl. Tanks hor. & vert. 150 to 11000 gal.
Aluminum Tanks 7000 to 12000 gal.
Stainless Bubble Cap Columns 36"x17'; 48"x40'; 54"x30'; 72"x30'; 78"x18'.
Stainless Packed Columns, 12"x20'; 36"x21'.
Pfaudler 500 gal. ELL Reactor Jkt. & Agit.
Stainless Condensers—68 to 1000 sq. ft.
B&P 300 gal. Stainless 18DIM Sigma Mixer.
Dopp 1000; 1700 gal. Reactors Jkt., Agit.
435 sq. ft. S.S. Single Effect Evaporator.
Goslin Birm. 36"x24" S.S. Rot. Vac. Filter.
6"x8" Buflovak Dbl. Drum Rot. Vac. Dryer.
Sharples C27 Super-D-Hydrator 316 S.S.
Rochester 30" S.S. Susp. Centrifuges.
Buflovak 6' Crystallizers Atmos. & Vac.
Swenson 24"x20' Jkt'd. SS316 Crystallizer.
Nash #9, #4, K5 Vacuum Pumps.
Squire 500 sq. ft. Tray/Truck Dryer.
Copper Bubble Cap Columns 2' to 6' dia.
Copper Condensers—82 to 2950 sq. ft.
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Norwalk 5 Stage Compressor 15000 PSI.
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1—42" Sperry Filter 40-plates, 41-frames, hyd. closing, open del.
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1—Schutz-O'Neill Pulverizer 22", Style D.
1—Abbe Pebble Mill 5' x 22'.
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1—250 gal. S.S. Kettle, nickel jacket, 100#.
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1—Glascote 600 gallon glass lined tank.
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1—Stokes vacuum shelf dryer model 138-B, stainless steel shelf.

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ACETYL ACETONE—1 dm, Aceto Chemical Co, Liverpool
AGAR—4 cs, T M Duche & Sons, Shimizu
ALGINATES—31 dms, Olympic Shipping Co, Bremen
ALUMINUM FLUORIDE—280 bgs, Atlantic Raw Materials, Genoa
ALUMINUM SULFATE—440 bgs, Industrial Chemical & Dye Co, Liverpool
AMMONIUM CARBONATE—15 dms, American Agricultural Chemical Co, Glasgow
AMYLOSE—200 bgs, National Starch & Chemicals Corp, Rotterdam
ANILINE DYES—18 dms, Heemsoth Kerner, Liverpool
62 dms, Geigy Chemical Corp, Bremerhaven
26 dms, H Bruckmann & Lorbacher, Hamburg
31 dms, Sandoz Inc, Havre
ANNATTO SEED—100 bgs, H Kohnstamm & Co, Kingston
342 bgs, Dorf International, Kingston
45 bgs, Foreign Domestic Distributors, Callao
ANTIMONY OXIDE—632 bgs, National Lead Co, Liverpool
230 bgs, National Lead Co, Middlesbrough
ANTIMONY REGULUS—100 cs, Indussa Corp, Antwerp
ARABIC GUM—500 bgs, Morningstar Paisley Inc, Port Sudan
200 bgs, Colony Import & Export Corp, Port Sudan
75 dms, Wm M Allison & Co, London
ASAFETIDA—33 bbls, Khorramshahr
ASBESTOS FIBER—600 bgs, N American Asbestos Corp, Lourenco Marques
BEESWAX—100 bgs, Buenos Aires
100 bgs, Ciudad Trujillo
60 bgs, Puerto Plata
BERGAMOT OIL—18 hf cs, Chase Manhattan Bank, Messina
102 hf cs, Messina
BOIS DE ROSE OIL—6 dms, Hollander Trading Corp, Callao
BONE—347 bgs, Velleman Corp, Santos
2,090 bgs, International Packers Ltd, Buenos Aires
BONEMEAL—90 dms, Harrisons & Crossfield, Antwerp
BORNYL ACETATE—1 cs, Lo Curto & Funk, Hamburg
BRONZE POWDER—53 cs, M Snedeker Corp, Hamburg
CALCIUM CARBONATE—1,200 bgs, Pluess Staufer, Antwerp
400 bgs, C B Chrystal Co, Hull
1,400 bgs, Whittaker Clark & Daniels, Hull
360 bgs, J T Baker Chemical Co, London
2,080 bgs, N H Weitzner, Antwerp
1,000 bgs, Smith Chemical & Color Co, Hull
CALCIUM PHOSFATE, DIBASIC—360 bgs, Wessel Duval & Co, Antwerp
CAMPHOR OIL—50 dms, Norda Essential Oil & Chemical Co, Keelung
CARAWAY SEED—200 bgs, M J Golombeck, Rotterdam
CARBON, ACTIVATED—30 dms, London
CARBON TETRACHLORIDE—40 dms, Genoa
CARDAMON SEED—88 cs, Wm E Martin & Sons, Port Matias de Galvez
CASEIN—1,000 bgs, P A Dunkel, Buenos Aires
6,000 bgs, E Lang, Buenos Aires
1,000 bgs, Crawford Kish & Co, Gdynia
9,488 bgs, A J Mills & Co, New Plymouth
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1,617 bgs, Hamburg
CASSIA—1,093 bls, Rotterdam
CASTOR OIL—140 tons, Recife
CELERY SEED—262 bgs, Fritzsche Bros, Bombay
255 bgs, Louis Furth, Bombay
174 bgs, C Czarinkow, Bombay
175 bgs, Daarnhower & Co, Bombay
CETYL BROMIDE—5 dms, Heemsoth Kerner, Liverpool
CHESTNUT EXTRACT—2,200 bgs, Barkey Importing Co, Genoa
CHLORINATED RUBBER—500 bgs, C M C Chemicals Inc, Liverpool
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CITRONELLA OIL—100 dms, L A Champon & Co, Keelung
230 dms, George Uhe Co, Keelung
25 dms, Lo Curto & Funk, Puerto Barrios
CLAY, BURNT—485 bgs, Markath Trading Co, Liverpool
COCONUT OIL—700 tons, National City Bank, Cebu
COPAL GUM—160 bkts, O G Innes Corp, Macassar
14 bgs, O G Innes Corp, Singapore
CORN OIL—200 tons, Corn Products Co, Rotterdam
CORN STARCH—1,000 bgs, Geismar & Co, Bremen
300 bgs, Rotterdam
CORNMINT OIL—4 dms, Polarome Manufacturing Co, Santos
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CREAM OF TARTAR—1,000 bgs, Leonhardt & Brush, London
500 bgs, T M Duche & Sons, Genoa
CRYOLITE, SYNTHETIC—273 bgs, Francesco Parisi, Venice
CUBE POWDER—482 bgs, Foreign Domestic Distributors, Callao
CUMIN SEED—200 bgs, Chase Manhattan Bank, Khorramshahr
140 bgs, Khorramshahr
CUTTLEFISH BONE—150 cs, Morgan Guaranty Trust Co, Kobe
150 cs, Havre
CYANURIC CHLORIDE—1,000 dms, Geigy Chemical Corp, Rotterdam
DAMMAR GUM—28 bgs, Wm H Scheel, Singapore
140 bgs, O G Innes Corp, Singapore
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DILL SEED—160 bgs, Archibald & Kendall, Bombay
40 bgs, Hismoco American Co, Bombay
156 bgs, M J Golombeck, Bombay
DIPYRONE—10 dms, American Roland Corp, Antwerp
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ETHYL LACTATE—42 dms, H Bruckmann & Lorbacher, Rotterdam
FARINA STARCH—224 bgs, D C Andrews, London
FISHLIVER OIL—17 dms, Mitsubishi Corp, Yokohama
5 dms, Arista Oil Products Corp, Yokohama
FISHMEAL—1,740 bgs, Callao
FORMIC ACID—47 dms, Rotterdam
FURFURAL—892 tons, E I Dupont De Nemours & Co, La Romana
GALLNUTS—250 bgs, National City Bank, Beirut
1,500 bgs, Izmir
GELATIN—22 Onyx Chemical Corp, Bremen
211 bbls, Riches Nelson, Antwerp
1,040 bgs, T M Duche & Sons, Antwerp
41 bbls, Coignet Chemical Co, Antwerp
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60 bgs, Louis Furth, Kingston
84 bgs, S B Penick & Co, Freetown
558 bgs, Freetown
240 bgs, Cochin
438 bgs, Lagos
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GLYCINE—20 dms, Henley & Co, Havre
GRAPHITE—250 bgs, Asbury Graphite Mills, Colombo
29 bgs, National City Bank, Havre
GUAR GUM—30 bgs, Nehls & O'Connell, Genoa
25 bgs, P A Dunkel, Genoa
GYPSUM, CRUDE—9,939 tons, U S Gypsum Co, Hantsport
HEPTANOIC ACID—62 dms, International Selling Corp, Marseille
IODINE, CRUDE—100 dms, Bunge Corp, Yokohama
IRON BLUE—12 dms, Van Oppen & Co, Liverpool
IRON POWDER, ELECTROLYTIC—20 dms, Gyma Lab, London
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248 bgs, Stein Hall & Co, Bombay
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KAURI GUM—35 bgs, S Winterbourne & Co, Auckland
KEROSENE—133,060 bbls, Humble Oil Co, Aruba
LACTOSE—50 dms, Lo Curto & Funk, Hamburg
235 dms, Chas L Huisking & Co, Liverpool
LAUREL LEAVES—18 b[illegible]zmir
LAURYL ALCOHOL—30 dms, A & S Corp, Kobe
LEAD, RED—160 bgs, Rotterdam
LEAD, WHITE—400 bgs, Rotterdam
LEAD NITRATE—20 cks, London
LEMONGRASS OIL—25 dms, Leonhardt & Brush, Puerto Barrios
LICORICE ROOT—369 bls, Wm E Martin & Sons, Piraeus
MACE—28 cs, Catz American Co, Singapore
MAGNESITE—1,000 bgs, Cochin
MAGNESIUM CARBONATE—200 bgs, Reheis Co, Liverpool
55 cs, Chas L Huisking & Co, Genoa
MALONIC ACID—3 cs, Interstate Universal Inc, Bremen
1 dm, Nysco Lab, Bremen
MANDRIN OIL—2 cks, Messina
MENTHOL—50 cs, Norda Essential Oil & Chemical Co, Santos
90 cs, Vick Chemical Co, Santos
525 cs, Mitsui & Co, Santos
205 cs, American Far Eastern Syndicate, Santos
22 cks, Biddle Sawyer Corp, Marseille
50 cs, Imco Trading Co, Santos
65 cs, P A Dunkel, Santos
5 cs, Fleischmand Burd & Co, Keelung
MINERAL COLORS—55 bgs, Revelli Chemicals Inc, Hamburg
MOLASSES—300 tons, Pacific Molasses Co, Salaverry
MOLASSES, BEET—9,109 tons, Chas Pfizer & Co, Havre
MONOCHLOROACETIC ACID—80 dms, Bremen
MUSK, ARTIFICIAL—7 dms, Roure-Dupont Inc, Rotterdam
MUSTARD SEED—300 bgs, P H Petry, Copenhagen
MYRRH GUM—120 bgs, S B Penick & Co, Aden
50 bgs, F D Keller & Son, Aden
NAPHTHALENE—320 bgs, Witco Chemical Co, Middlesbrough
890 bgs, Koppers Co, Middlesbrough
1,146 bgs, [illegible] Yorker, Middlesbrough
655 bgs, Hudson Shipping Co, Glasgow
2,310 bgs, M W Hardy & Co, Gdynia
428 bgs, Koppers Co, Hull
3,410 bgs, H A Gogarty, Antwerp
3,572 bgs, M W Hardy & Co, Rotterdam
NAPHTHENIC ACID—68 dms, Imperial Oil Ltd, Barranquilla
NICOTINE ALKALOID—5 dms, Prentiss Drug & Chemical Co, Liverpool
6 dms, Cosmos Shipping Co, Liverpool
NIGER SEED—72 bgs, Levy & Levis Co, Casablanca
o-NITROBENZOIC ACID—3 dms, Kard Ellis, Hamburg
3-NITRO-4-HYDROXYPHENYL ARSONIC ACID — 35 cks, Havre
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569 bgs, P H Petry, Hamburg
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25 dms, Simone Bros, Seville
625 dms, National City Bank, Seville
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560 bgs, Ludwig Mueller, Tandjong Priok
140 bgs, Berns & Koppstein, Singapore
140 bgs, Atlanta Textile Corp, Singapore
420 bgs, A G Dunn, Singapore
80 bgs, A G Dunn, Cochin
320 bgs, Ludwig Mueller, Pandjang
630 bgs, Singapore
80 bgs, Cochin
PEPPER, RED—100 bgs, California Commodities Corp, Kobe
220 bgs, Yokohama
320 bgs, Lagos
PEPPER, WHITE—70 bgs, A G Dunn, Singapore
130 bgs, Mincing Trading Corp, Singapore
180 bgs, George Uhe Co, Singapore
60 bgs, K H Landes & Co, Singapore
140 bgs, C M Van Sillevoldt, Singapore
120 bgs, Singapore
PIGMENT GREEN B—10 dms, Chemical Bank, London
PIPERAZINE ADIPATE—41 dms, Copenhagen
POLLACKLIVER OIL—50 dms, Mitsubishi Corp, Yokohama
100 dms, Interocean Chemical & Minerals Corp, Yokohama
50 dms, F B Wilcon Co, Yokohama
POLYVINYL CHLORIDE—800 bgs, B F Goodrich, Havre
POPPYSEED—200 bgs, Levy & Levis Co, Rotterdam
300 bgs, Louis Furth, Rotterdam
1,000 bgs, Hoger Corp, Istanbul
200 bgs, Izmir
POTASSIUM CHLORIDE—272 bgs, Riches Nelson, Hamburg
POTASSIUM METABISULFITE—125 dms, Basf Inc, Rotterdam
POTASSIUM NITRATE—200 bgs, Bremen
POTASSIUM SILICOFLUORIDE—600 bgs, London
PYRENE—6 dms, Terra Chemicals Inc, Rotterdam
PYRETHRUM EXTRACT—14 dms, Prentiss Drug & Chemical Co, Mombasa
86 dms, Mombasa
QUEBRACHO EXTRACT—500 bgs, Barkey Importing Co, Buenos Aires
QUINCE SEED—17 bgs, Khorramshahr
QUINIDINE SULFATE—5 dms, Chas L Huisking & Co, Hamburg
6 dms, Lo Curto & Funk, Hamburg
QUININE SULFATE—3 kgs, Frank Samuel & Co, Southampton
RESORCINOL—20 dms, Hamburg
RICE STARCH—200 bgs, American Key Products, Trieste
400 bgs, Manhattan Adhesives Corp, Trieste
SACCHARIN—10 dms, Yokohama
R-SALT—12 dms, Crescent Chemical Co, Liverpool
SANDALWOOD OIL—9 cs, George Lueders & Co, Cochin
5 cs, Antoine Chiris Co, Bombay
5 cs, Lo Curto & Funk, Cochin
SEEDLAC—250 bgs, Wah Chang Corp, Bangkok
SENNA LEAVES—50 bls, Max Van Pels, Tuticorin
SESAME OIL—50 dms, Magnus Mabee & Reynard, Kobe
SESAME SEED—2,000 bgs, Independent Halvah & Candies, Puerto Barrios
SHELLAC—290 bgs, National City Bank, Hamburg
SODA ASH—400 dms, Triangle Forwarding Co, London
SODIUM ALGINATE—10 dms, T M Duche & Sons, Glasgow
SODIUM BENZOATE—46 dms, American Roland Corp, Hamburg
SODIUM BOROHYDRIDE—20 dms, Metal Hydrides Inc, Hamburg
36 dms, Callery Chemical Co, Hamburg
SODIUM CARBONATE, MONOHYDRATE—45 bgs, Chemical Manufacturing Co, Liverpool
SODIUM CYANIDE—280 dms, American Cyanamid Co, Liverpool
SODIUM FERROCYANIDE—400 bgs, Filo Color & Chemical Corp, Antwerp
SODIUM SILICOFLUORIDE—200 bgs, Hamburg
SODIUM SULFATE, ANHYDROUS—400 bgs, Lo [illegible]r
SODIUM SULFITE—50 bgs, BASF Inc, Rotterdam
STAR[illegible]c, Rotterdam
STYRAX—31 cs, Meer Corp, Iskenderun
SULFANILAMIDE—7 dms, Copenhagen
TALC—[illegible]
TAPIOCA FLOUR—6,720 bgs, Morningstar Paisley Inc, Kohsichang
507 bgs, Stein Hall & Co, Kohsichang
2,240 bgs, Manhattan Adhesives Corp, Penang
TARTARIC ACID—250 bgs, Nylos Trading Co, Genoa
THYROID POWDER—6 dms, Cosmos Shipping Co, Buenos Aires
TITANIUM DIOXIDE, ANATASE—1,163 bgs, Nafto Forwarding Co, Kobe
TRAGACANTH GUM—[illegible]3 bgs, Am-Iran Corp, Khorramshahr
219 bgs, Khorramshahr
TRICHLOROACETIC ACID—20 dms, Cosmos Shipping Co, Hamburg
TRICHLOROETH[illegible]—300 tons, International Selling Corp, Marseille
TUNG OIL—600 tons, Buenos Aires
TURMERIC—22 bgs, Foreign Domestic Distributors, Callao
80 bgs, Mincing Trading Corp, Cochin
ULTRAMARINE BLUE—310 bgs, Whittaker Clark & Daniels, Hull
390 bgs, Whittaker Clark & Daniels, London
UNDECYLENIC ACID—47 dms, International Selling Corp, Marseille
UREA—1,000 bgs, H A Gogarty, Rotterdam
600 bgs, International Chemical Corp, Yokoh[illegible]
600 bgs, Chemical Manufacturing Co, Liverpool
VALO[illegible]—2,574 bgs, Izmir
VANILLA—20 dms, Zink & Trieste, Marseille
VANILLA BEANS—65 tins, J Manheimer, Singapore
VETIVER OIL—2 dms, Fritzsche Bros, Port Au Prince
WATTLE EXTRACT—112 bgs, International Products Corp, Mombasa
564 bgs, Barkey Importing Co, Dares Salaam
ZINC CYANIDE—22 dms, Bergan Supply Co, Genoa
ZINC OXIDE—480 bgs, London

### *Los Angeles*

AGAR—25 cs, Pan Asiatic Trading Co, Shimizu
ARABIC GUM—300 bgs, Hathaway Allied Products, Genoa
CALCIUM NITRATE—7,000 bgs, Antwerp
CALCIUM PHOSPHATE, DIBASIC—1,654 bgs, J H Schroder, Antwerp
CARAWAY SEED—200 bgs, California Commodities Corp, Rotterdam
CASEIN—320 bgs, A J Mills & Co, Wellington
CINNAMON QUILLS—100 bls, T P Gonzales, Colombo
COPRA—112 tons, Balfour Guthrie, Manila
508 tons, Procter & Gamble Co, Nasipit
FISHMEAL—2,476 bgs, Balfour Guthrie, Arica
4,352 bgs, H J Baker & Bro, Arica
3,696 bgs, Albumina Supply Co, Chimbote
MACE—57 cs, Foreign Domestic Sales Corp, Singapore
29 cs, Hismoco American Co, Singapore
28 cs, Magna Enterprises, Singapore
MOLASSES—13,020 tons, Pacific Molasses Co, Port Esquivel
NAPHTHA—133,220 bbls, Texaco Co, Point a Pierre
28,598 bbls, Mobil Oil Co, Point a Pierre
NUTMEG—54 bgs, California Commodities Corp, Singapore
56 bgs, Singapore
PALM OIL—560 tons, Belawan Deli
559 tons, Port Swettenham
PEPPER, BLACK—35 bgs, Singapore
PEPPER, WHITE—35 bgs, Singapore
PERCHLOROETHYLENE—55 dms, International Selling Corp, Marseille
QUEBRACHO EXTRACT—800 bgs, Tanimex Corp, Buenos Aires
SESAME SEED—350 bgs, Hismoco American Co, Corinto
200 bgs, Nieman Bros, Corinto
255 bgs, W R Grace & Co, Corinto
TUNG OIL—118 tons, Internatio Rotterdam, Buenos Aires
100 tons, Bowring & Co, Buenos Aires

### *Philadelphia*

ANTIMONY OXIDE—320 bgs, Liverpool
ASBESTOS FIBER—1,000 bgs, Rubberoid Co, Lourenco Marques
300 bgs, Chas Kurz & Co, Port Elizabeth
600 bgs, N American Asbestos Corp, Durban
BONE—2,404 bgs, Ossa Products, Buenos Aires
2,925 bgs, Kind & Knox, Bombay
583 bgs, Phila National Bank, Calcutta
CALCIUM GLUCONATE—20 dms, Frank Samuel & Co, Rotterdam
CALCIUM PHOSPHATE, DIBASIC—1,905 bgs, Wessel Duval & Co, Antwerp
CAMPHOR POWDER—100 cs, Vicks Chemical Co, Kobe
CASEIN—600 bgs, National Casein Co, Melbourne
CHESTNUT EXTRACT—500 bgs, Barkey Importing Co, Genoa
CRESYLIC ACID—100 dms, Concord Chemical Co, Manchester
DEGRAS—58 dms, Bankers Trust Co, Manchester
DIVI DIVI—624 bgs, Keer Maurer, Cartagena
GLANDS, PANCREAS—349 cs, Auckland
200 cs, Napier
100 cs, Port Adelaide
GLYCERINE—408 tons, Lever Bros, Manila
175 tons, L Pasternak, Buenos Aires
GYPSUM—150 dms, Manchester
GYPSUM, CRUDE—11,137 tons, National Gypsum Co, Halifax
MAGNESITE—1,450 tons, Split
MANGROVE EXTRACT—331 bgs, Lourenco Marques
MENTHOL—30 cs, Keelung
NAPHTHA—135,230 bbls, Atlantic Refining Co, London
NAPHTHALENE—625 bgs, Allied Chemical Corp, Rotterdam
RUTILE SAND—1,984 bgs, Sydney
SESAME OIL—25 dms, I R Boody & Co, Copenhagen
SHELLAC—200 bgs, Calcutta
SODIUM BICARBONATE—1,000 bgs, Chemical Manufacturing Co, Liverpool
SODIUM CYANIDE—250 dms, Chemical Manufacturing Co, Liverpool
SULFUR, CRUDE—3,048 tons, E I duPont de Nemours & Co, Coatzacoalcos
TALC—1,600 bgs, Whittaker Clark & Daniels, Bordeaux
1,800 bgs, Moore & Munger, Bordeaux
TAPIOCA FLOUR—1,344 bgs, Morningstar Paisley Inc, Bangkok
700 bgs, Houghton Inc, Bangkok
UREA—1,102 bgs, Nylos Trading Co, Genoa
WATTLE EXTRACT—553 bgs, International Products Corp, Durban
429 bgs, Elkan River Plate Corp, Durban
600 bgs, Mombasa
ZIRCON SAND—1,946 bgs, Frank Samuel & Co, Brisbane
1,000 bgs, Sydney

### *San Francisco*

AMMONIUM CHLORIDE—70 bbls, Great Western Chemical Co, Antwerp
ANISE SEED—52 bgs, Salina Cruz
ASBESTOS FIBER—7,400 bgs, Hong Kong
tert-BUTYL ALCOHOL—10 dms, U S Peroxygen Corp, Hamburg
CASEIN—357 bgs, Western Dairy Products, Melbourne
1,500 bgs, J R Spellacy, Sydney
400 bgs, Western Dairy Products, Auckland
COPPERAS—400 bgs, P W Bellingall, Kobe
COPRA—1,000 tons, Cargill Inc, Cagayan de Oro
1,000 tons, Cargill Inc, Dipolog
750 tons, Cargill Inc, Siain
1,500 tons, Siain
1,000 tons, Dipolog
1,800 tons, Cagayan de Oro
GYPSUM, CRUDE—10,153 tons, Kaiser Gypsum Co, San Marcos
MOLASSES—2,452 tons, S Western Sugar & Molasses Co, Manila
MONOSODIUM GLUTAMATE—150 dms, Ajinomoto Co, Yokohama
OLIVE OIL—25 dms, A Giurlani & Bro, Leghorn
OREGANO—234 bgs, H M Newhall & Co, Salina Cruz
PERCHLOROETHYLENE—75 dms, International Selling Corp, Marseille
QUEBRACHO EXTRACT—618 bgs, Barkey Importing Co, Buenos Aires
SESAME SEED—50 bgs, W R Grace & Co, Corinto
1,890 bgs, San Jose
200 bgs, San Juan del Sur
STARCH—100 bgs, Stein Hall & Co, Amsterdam
TALC—500 bgs, Charles Mathieu, Genoa
TANKAGE—525 bgs, Tupman Thurlow, Buenos Aires
TUNG OIL—150 tons, Pacific Vegetable Oil Corp, Buenos Aires

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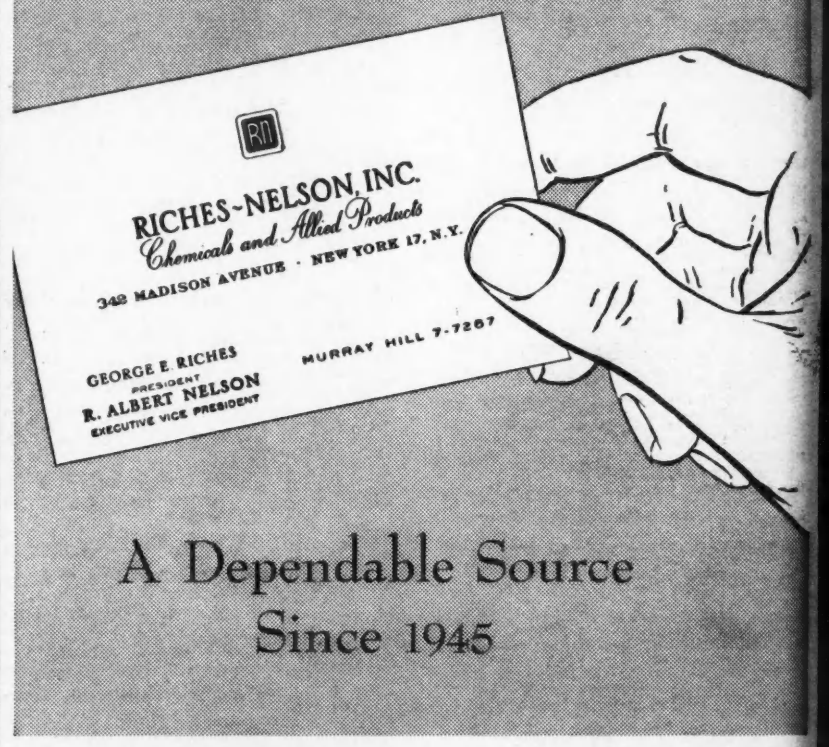


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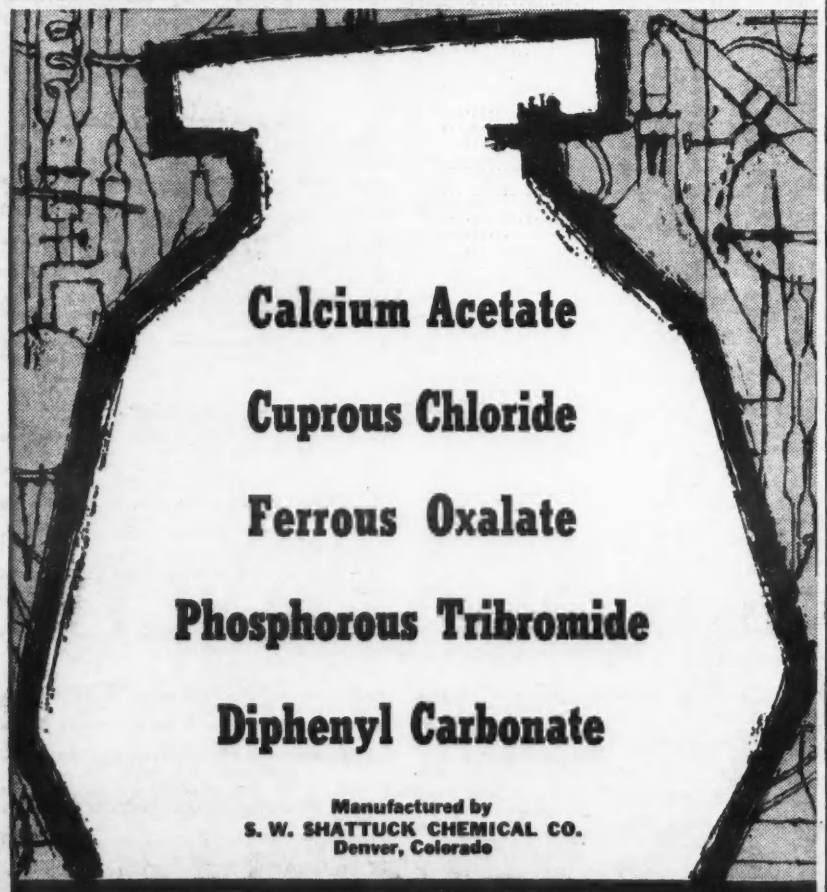

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